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Supply, Demand, and Prices of California Peaches

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SUPPLY, DEMAND, AND PRICES OF CALIFORNIA PEACHES[1,2,3]

H. R. WELLMAN[4]

SUMMARY

Virtually all of the United States tonnage of dried and canning peaches are produced in California. On the average fresh shipments from this state constitute only 8.5 per cent of the total national production of fresh peaches, and only 13.3 per cent of the California crop is shipped fresh. Freestone varieties are used mainly for drying and fresh shipment, clingstone varieties mainly for canning.

Clingstones.—The enormous increase in production of clingstone peaches in California during the past decade resulted in a marked downward trend in prices to both canners and growers. The decline in prices did not become serious, however, until 1927. From 1921 to 1926 the demand for canned peaches was increasing rapidly, which largely offset the increase in production. Since 1927 the trend of demand has increased only slowly, but production has continued upward. Consequently, prices dropped to unprofitably low levels.

With the marked drop in prices in 1927 the industry instituted a number of policies designed to limit the pack. During the past five years, with the exception of 1929 when the crop was very short, only No. 1 fruit of the Tuscan, Phillip, and New Midsummer varieties has been canned. In 1930 and 1931 large quantities of No. 1 fruit were purchased and left on the trees. Had this not been done, prices paid growers in these two years would have been considerably lower than they were.

The difficulties in the clingstone-peach industry arising out of the large increase in production have been greatly accentuated since 1929 by the pronounced decline in the buying power of consumers and by the decline in the general price level. The income of consumers, which de-

[1] Received for publication July 26, 1932.

[2] Paper No. 36, The Giannini Foundation of Agricultural Economics.

[3] This bulletin supersedes California Agricultural Extension Service Circular 1, which was published in April, 1926. That circular contained detailed statistics relating to the California peach industry for the years 1906 to 1925. Except in a few instances annual data for the years prior to 1920 are not republished in this bulletin. Instead, averages for the two five-year periods 1910–1914 and 1915–1919 are given.

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creased sharply between 1928–29 and 1930–31, was further reduced in 1931–32. During 1931–32 the Federal Reserve Board index of factory employment averaged 70 as against 81 in 1930–31 and 100 in 1928–29. The buying power of people engaged in agriculture experienced an even greater reduction than that of factory workers. The gross income from agricultural production in 1931 was 42 per cent below that of 1929, while net farm income unquestionably declined proportionately more than gross farm income. The recovery in the demand for canned peaches from the present low level depends chiefly upon improvement in the buying power of consumers. Just when such an improvement will occur, how rapidly it will develop, and what forces will bring it about are uncertain.

The recent decline in the general price level was a contributing factor to the low returns received by peach growers during the past two years. In sympathy with the marked drop in prices of all commodities since 1929, prices of canned peaches also declined. Costs of canning and producing peaches, however, did not decline as rapidly. Consequently there was a widening of the spread between the prices growers received for canning peaches and the prices they paid for commodities bought for living and production purposes. In 1932 there was a marked reduction in the wages paid to both farm and cannery laborers. For the next few years prices of many items used in producing and canning peaches are likely to come more closely in line with the general price level, which will tend to improve the net returns from clingstone-peach production.

Exports of canned peaches have been adversely affected by recent developments in the United Kingdom, which is our most important foreign market for canned fruits. The present depression is world-wide and the buying power of consumers has declined fully as much in the United Kingdom as in this country. In addition, the United Kingdom went off the gold standard in September, 1931, and the resulting decline in the value of the English pound in terms of United States dollars has tended to restrict exports to that country.

In the United Kingdom, California canned peaches meet considerable competition from those produced in Australia. Production of peaches in Australia has increased substantially within recent years. Indications are, however, that the peak of production in that country has been reached, and that some decrease is in prospect during the next few years.

Production of clingstone peaches in California has definitely passed the peak and is now declining. Low prices have resulted in cessation of plantings and the removal of trees from about 13,300 acres during the past two years. The trend of production of No. 1 canning clingstone

peaches north of the Tehachapi in 1932 was at 307,000 tons, 9 per cent below the trend in 1931. During the next few years a further decrease is in prospect. Plantings of Tuscans, New Midsummers, and Phillips since 1928 have amounted to only 2,000 acres, which is not sufficient to offset the normal removal of trees due to old age in the next four years. The peak of average yield from the present acreage was reached in 1932, and a gradual decrease in average yield per acre is to be expected as the orchards become older. Further removal, abandonment, and neglect are likely to occur as a result of the very low prices paid growers in 1932. Thus the surplus situation will eventually be corrected even though the present abnormally low demand for canned peaches should continue. Any improvement in demand during the next few years will, of course, shorten this period of surplus condition.

Freestones.—As contrasted with the rapid increase in production of clingstone peaches, the production of freestone peaches in California has declined. All of the decline thus far, however, has been in freestones used for canning. The output of dried peaches and the shipments of fresh peaches have remained at approximately the same levels. If the downward trend in total production continues, however, and present indications are that it will, the output of either dried or fresh peaches or both will tend downward.

About 90 per cent of the total acreage of freestone peaches in California in 1929 was in bearing and only 10 per cent was nonbearing. Furthermore, 64 per cent of the total acreage in that year was eleven years of age and over. During the next few years a considerable portion of this acreage will normally go out of bearing. Plantings of freestone peaches for the past few years have not been sufficient to offset this prospective decline. The decrease in production is likely to be most rapid in the principal drying varieties.

During the past ten years exports of dried peaches have averaged about 15 per cent of the total production. There has been no definite upward or downward trend in the proportion of the crop exported. For many years Canada, Germany, and the United Kingdom have been our most important export markets.

Prices of dried peaches, unlike the prices of most deciduous fruits, experienced no downward trend during the past decade. Prior to the pronounced decline in business conditions and employment, the demand for dried peaches was fairly constant. Production had not increased and consequently prices had not declined. With the prospect of a further downward trend in production dried peaches are likely to be in a favorable position whenever the buying power of consumers is materially increased.

From 1921 to 1926 production and shipments of fresh peaches in the United States increased rapidly. Since 1926 there has been a gradual decline. Virtually all of the change in the trend of United States production during the past decade occurred in the southern states. Indications are that the trend of production in that section will continue downward for the next few years. In 1929 only 28 per cent of the peach trees in the four states of Georgia, North Carolina, South Carolina, and Arkansas were less than six years of age, while 54 per cent were from six to nine years of age. This latter group of trees has now reached the age of maximum production and will soon be declining in productivity since the average commercial life of a peach tree in the southern states is only thirteen to fifteen years. The trend of production in all other states combined has neither increased nor decreased during the past decade, and the available information does not point toward any material change in the trend for the next few years.

The shipping season in California usually extends from June to October. The bulk of the crop, however, is shipped between the third week in July and the second week in August. Shipments from the southern states are at the maximum in July, while those from the midseason-shipping states are at the maximum in August. Thus shipments from other states are heaviest during the same two months that most of the California peaches are marketed.

When the peach crop in other states is large, as it was in 1931, markets for California fresh peaches are greatly restricted. On the other hand, when the peach crop in other states is small, as it was in 1930, California growers are able to expand their interstate shipments materially. During the coming years eastern markets may be expected to afford an outlet for a substantially larger volume of California fresh peaches than they did in 1931. Peach production in other states will average below the unusually large crop of that year. With the recovery of business conditions in this country, the buying power of consumers will increase, which will improve the demand for fresh peaches.

THE GENERAL SITUATION

Main Peach-Producing States. — Peaches are grown extensively throughout the United States. Crops of commercial importance are produced in forty of the forty-eight states. The relative importance of these forty states in the production of peaches is shown in figure 1; the circles in the states represent the average annual production during the

five years, 1926–1930. For many years California has been the foremost peach-producing state in the Union. From 1926 to 1930 an average of 41 per cent of the total national crop was produced in this state. Next in order of importance is Georgia, followed by New Jersey, Arkansas, New York, North Carolina, Illinois, Texas, and Pennsylvania. These nine states produce about 75 per cent of the total peaches grown in this country.

United States Production of Peaches, Average 1926–1930

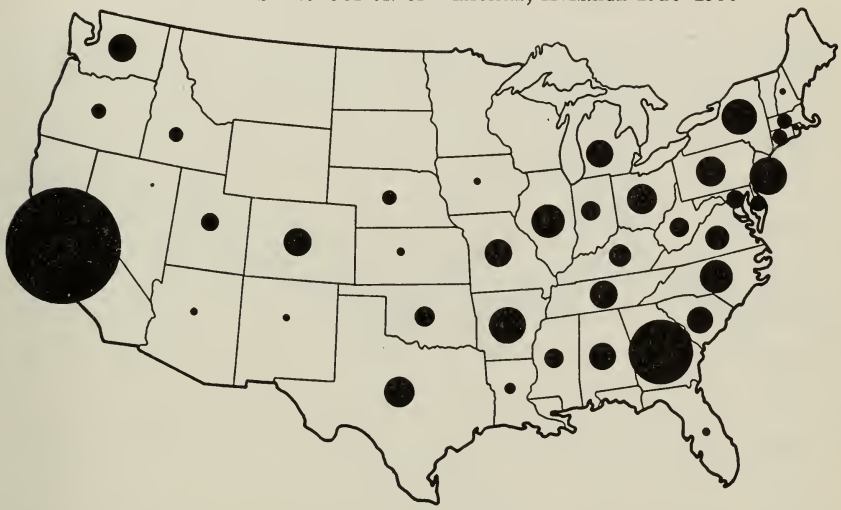


Fig. 1.—Although peaches are grown commercially in forty of the forty-eight states, the large-producing areas are confined to a comparatively few states.

Data from table 26.

Trend of United States Peach Production.—The annual total production of peaches in the United States from 1910 to 1931 is shown by the solid line in figure 2; the trend of production is represented by the broken curve. From 1910 to 1915 there was an upward trend in production. During the years immediately following 1915, however, production declined and remained at a relatively low level until 1921. Since 1921 the trend of production has again been upward. The increase was particularly rapid prior to 1928. Since then there has been only a small rise. It is probable that the peak in the upward trend of production has been reached and that during the next few years the trend will be downward. The actual production in 1931 was 29 per cent above the trend. In that year, conditions throughout the peach-producing sections of the country, with the exception of California, were particularly favorable to high yields.

Utilization of the United States Peach Crop.—The 1926–1930 average production of peaches in the United States amounted to 1,358,000 tons, of which 63.3 per cent were shipped fresh, 20.7 per cent canned, 9.4 per cent dried, and 6.6 per cent unharvested because of low prices. During the past twenty years there has been a steady decline in the proportion of the crop marketed fresh, and a steady increase in the proportion of the crop canned (table 1). The proportion of the crop dried

UNITED STATES TOTAL PRODUCTION OF PEACHES, 1910–1931

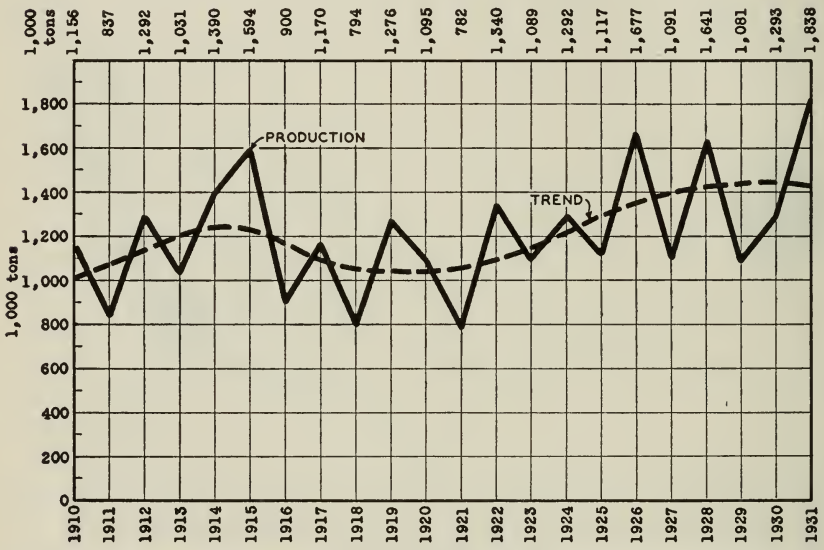


Fig. 2.—The peak in the recent upward trend of peach production in the United States came in 1930 or 1931.

Data from table 26.

increased during the first ten years of the period, but declined during the last ten years. The shift in the utilization of the crop from fresh to canned has been particularly marked. In 1910–1914 only 6.9 per cent of the crop was canned, as against 20.7 per cent in 1926–1930. On the other hand, 80.3 per cent of the crop was used fresh in 1910–1914, whereas only 63.3 per cent was so used in 1926–1930.

California's Position in the Peach Industry.—At the present time California not only produces about 41 per cent of the total crop of peaches grown in the United States, but also produces virtually all of the United States tonnage of dried and canning peaches. The commercial drying of peaches has always been confined to California. Commercial canning, however, was at one time of some importance in other

states. As late as 1919 about 11 per cent of the total canned pack of peaches in the United States was produced in states other than California, while in 1909 the volume produced outside of California amounted to 22 per cent of the total.

TABLE 1

Utilization of United States Production of Peaches, Averages 1910–1914 to 1926–1930

(Fresh equivalent)

	Average 1910–1914		Average 1915–1919		Average 1921–1925		Average 1926–1930	
	1,000 tons	Per cent	1,000 tons	Per cent	1,000 tons	Per cent	1,000 tons	Per cent
Shipped fresh	916	80.3	850	74.1	810	72.1	860	63.3
Canned	79	6.9	126	11.0	187	16.6	281	20.7
Dried	146	12.8	171	14.9	127	11.3	127	9.4
Total harvested	1,141	100.0	1,147	100.0	1,124	100.0	1,268	93.4
Unharvested	.....	.....	.....	.....	.....	.....	90	6.6
Total	1,141	100.0	1,147	100.0	1,124	100.0	1,358	100.0

Source of data: table 27.

TABLE 2

Utilization of California Production of Peaches, Averages 1910–1914 to 1926–1930

(Fresh equivalent)

	Average 1910–1914		Average 1915–1919		Average 1921–1925		Average 1926–1930	
	Tons	Per cent	Tons	Per cent	Tons	Per cent	Tons	Per cent
Canned	66,000	26.2	110,600	33.6	182,200	50.0	274,720	49.6
Dried	146,000	57.8	171,200	51.9	127,400	34.9	126,740	22.9
Shipped fresh	40,400	16.0	47,800	14.5	55,200	15.1	73,880	13.4
Total harvested	252,400	100.0	329,600	100.0	364,800	100.0	475,340	85.9
Unharvested	.....	.....	.....	.....	.....	.....	78,060	14.1
Total	252,400	100.0	329,600	100.0	364,800	100.0	553,400	100.0

Source of data: table 28.

As contrasted with the dried and canned-peach situations, California is of relatively minor importance in the production of fresh peaches. Our annual average production of peaches for fresh shipment has, therefore, little influence upon the total volume marketed in the United States, but expansion or contraction of our output of dried or canned peaches results in an equivalent change in the United States output of these commodities.

Utilization of the California Peach Crop.—The disposition of the California peach crop is given in table 2. Of the average 1926–1930 production of 553,400 tons, 49.6 per cent was canned, 22.9 per cent dried, 13.4 per cent shipped fresh, and 14.1 per cent unharvested because of low prices. While there has been no appreciably significant change in the proportion of the crop used fresh during the past twenty years, there has been a marked change in the proportions dried and canned. Between 1910–1914 and 1926–1930 the proportion of the total crop dried decreased from 57.8 per cent to 22.9 per cent, whereas the proportion canned increased from 26.2 per cent to 49.6 per cent. The increase in the proportion canned would have been even larger if the pack had not been limited by industry agreement. The 14.1 per cent of the peaches unharvested in 1926–1930 were almost entirely of clingstone varieties, which are used primarily for canning.

CANNED PEACHES

Trend of Canned-Peach Pack in California.—The annual pack of canned peaches in California from 1921 to 1931 is represented by the bars in figure 3. Until 1928 there was a pronounced upward trend in the pack. This upward trend was approximately at the same rate as that which had prevailed for many years prior to 1921. Table 3 gives the average packs for the five-year periods, 1910–1914 to 1926–1930. The

CALIFORNIA PACK OF CLINGSTONE AND FREESTONE PEACHES, 1921–1931

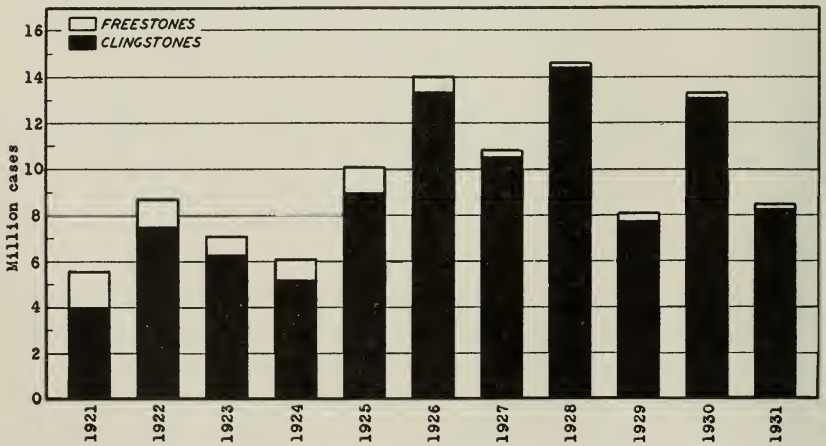


Fig. 3.—From 1921 to 1928 there was a pronounced increase in the pack of canned peaches in California; since 1928 there has been a decrease.

Data from table 30.

percentage increase in the average packs from 1910–1914 to 1915–1919 was 67 per cent, from 1915–1919 to 1921–1925, 64 per cent, and from 1921–1925 to 1926–1930, 61 per cent. Since 1928 there has been no further upward trend in the pack. In fact, the average quantity canned during the three years 1929–1931 was 24 per cent below the 1926–1928 average. The small pack in 1929 was the result of a severe freeze in April of that year, while the 1930 and 1931 packs were limited by industry agreement.

In the past five years, 1927–1931, the pack of canned peaches has consisted almost entirely of clingstones. In figure 3, the black portion of the bars represents the pack of clingstones, the white portion the pack of freestones. From 1921–1925 the average pack of freestones amounted

TABLE 3

California Pack of Canned Peaches, Averages 1910–1914 to 1926–1930

	Average 1910–1914	Average 1915–1919	Average 1921–1925	Average 1926–1930
	*1,000 cases**	*1,000 cases**	*1,000 cases**	*1,000 cases**
Clingstone	1,858	3,260	6,416	11,822
Freestone	903	1,346	1,156	350
Total	2,761	4,606	7,572	12,172

* No. 2½-can basis.

Source of data: table 30.

to 1,156,000 cases, whereas during the five years 1927–1931 it amounted to only 208,000 cases. In the former period freestones constituted 15 per cent of the total pack, in the latter period only 2 per cent. Canned freestone peaches were of even more importance prior to 1921 than they were from 1921 to 1925. During the five years, 1915–1919, they averaged 29 per cent of the total pack, and from 1910–1914, 33 per cent.

Utilization of Clingstone Peaches.—Canning is the primary outlet for clingstone peaches. During recent years a few thousand tons have been shipped fresh and a small quantity has been dried. The bulk of the harvested crop, however, has been canned. Table 4 gives the disposition of the clingstone-peach crops from 1920–1931. Prior to 1927 practically all of the clingstone peaches grown in the state were used for canning. Canners accepted No. 2 fruit at one-half the price paid for No. 1 fruit. No distinction between varieties was made. The prices paid by canners for No. 1 fruit were generally higher than could be obtained for the same quality shipped fresh to local or eastern markets. Consequently fresh shipments prior to 1927 did not average more than 2,000

or 3,000 tons annually. Commercial drying of clingstone peaches was virtually unknown.

With the marked drop in prices of both canned and canning clingstone peaches in 1927, the industry instituted a number of policies designed to limit the pack. During the past five years, with the exception of 1929 when the crop was very short, canning has been confined almost

TABLE 4

CALIFORNIA PRODUCTION OF CLINGSTONE PEACHES BY USES, AVERAGES 1910–1914 TO 1926–1930, ANNUAL 1920–1931

Year	Total	Unharvested	Harvested	Canned in fresh equivalent	Shipped fresh	Dried in fresh equivalent
	1	*2*	*3*	*4*	*5*	*6*
Averages:	*tons*	*tons*	*tons*	*tons*	*tons*	*tons*
1910–1914	44,400	.....	44,400	44,400	.....	.....
1915–1919	78,400	.....	78,400	78,400	.....	.....
1921–1925	154,400	.....	154,400	154,400	.....	.....
1926–1930	356,800	75,660	281,140	266,280	14,860	.....
Annual:						
1920	121,000	.....	121,000	121,000	.....	.....
1921	97,000	.....	97,000	97,000	.....	.....
1922	182,000	.....	182,000	182,000	.....	.....
1923	153,000	.....	153,000	153,000	.....	.....
1924	125,000	.....	125,000	125,000	.....	.....
1925	215,000	.....	215,000	215,000	.....	.....
1926	327,000	.....	327,000	318,000	9,000	.....
1927	322,000	65,000	257,000	230,000	27,000	.....
1928	414,000	70,000	344,000	322,000	22,000	.....
1929	179,000	0	179,000	173,300	5,700	.....
1930	542,000	243,300	298,700	288,100	10,600	.....
1931	397,000	193,500	203,500	181,500	13,900	8,100

Sources of data:

1910–1925: from table 30, col. 2. The number of cases per ton varied between 41 and 43.

1926–1931: from California Cooperative Crop Reporting Service, Sacramento. Prior to 1926 definite information on the amount of clingstone peaches shipped fresh is not available. It is known, however, that the volume shipped fresh prior to 1926 was small. A small quantity of clingstone peaches was dried in 1930.

entirely to No. 1 fruit of the newer-type varieties; very few Old Midsummer Clings, White Clings, and Levi Clings, commonly known as the older-type varieties, have been packed. In 1930 and 1931 large quantities of No. 1 fruit were purchased and left on the trees.

The relatively low prices paid growers for clingstone peaches since 1926, together with the refusal of canners to accept the older-type varieties, stimulated growers to find other outlets. In 1927 growers sold about 27,000 tons of clingstones for fresh shipment, as against 9,000 tons in 1926. Average annual sales of clingstone peaches on the Chicago auction market from 1922 to 1926 amounted to 32,900 boxes, as against

an average of 84,203 boxes during the five years 1927–1931. Approximately 65 per cent of the total increase of 51,303 boxes was in the older-type varieties not now accepted by canners (table 5). As a result of the large increase in shipments, prices declined from an average of $1.23 a box at Chicago in 1922–1926 to an average of $1.02 a box in 1927–1931. Prior to 1927, prices of clingstone peaches at Chicago averaged $0.26 a box above that of Elbertas; since 1927 they have averaged only $0.05 a

TABLE 5

Sales and Prices of California Clingstone Peaches, Chicago Auction Market, 1922–1931

Year	Sales			Price per box, all varieties
	Tuscans, Phillips, New Midsummers	Levi Clings, White Clings, Old Midsummers	Total	
	boxes	*boxes*	*boxes*	*dollars*
Averages:				
1922–1926	15,896	17,004	32,900	1.23
1927–1931	33,946	50,257	84,203	1.02
Annual:				
1922	5,177	4,329	9,506	1.19
1923	32,529	19,022	51,551	1.03
1924	14,948	20,200	35,148	1.43
1925	16,015	28,803	44,818	1.41
1926	10,812	12,667	23,479	1.11
1927	32,481	69,907	102,388	0.99
1928	41,310	34,419	75,729	0.94
1929	14,317	24,449	38,766	1.34
1930	62,029	87,107	149,136	0.95
1931	19,595	35,405	55,000	0.88

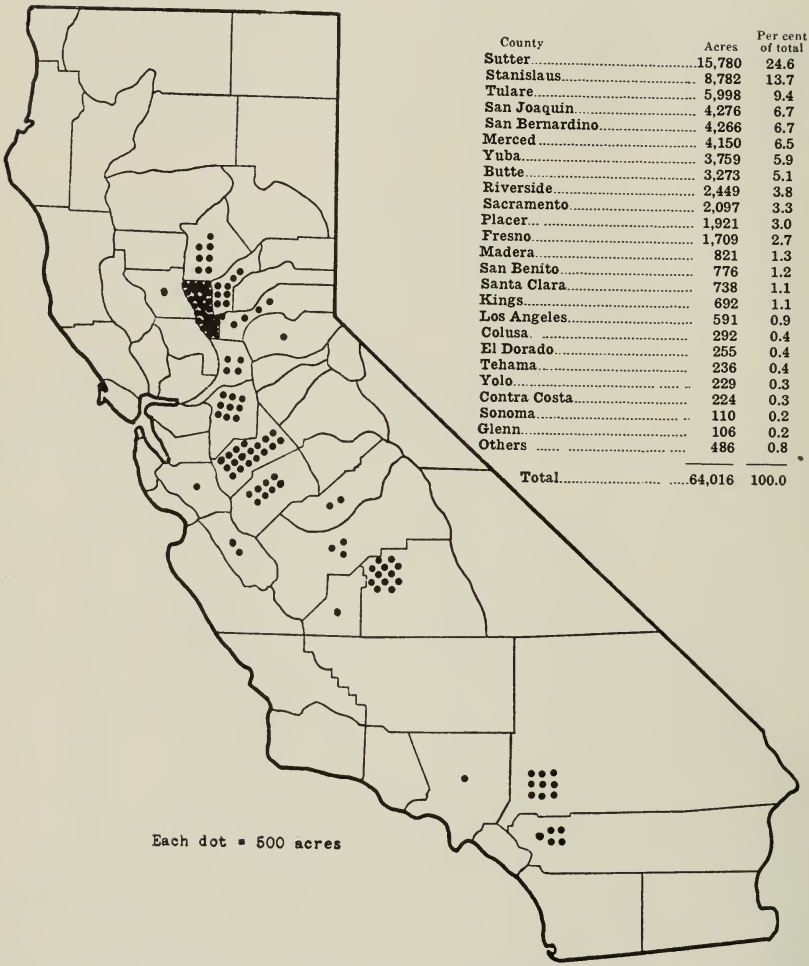
Source of data: Compiled from Chicago Daily Fruit and Vegetable Reporter.

box higher; and in 1931 they were $0.01 a box lower. Thus the experience of recent years indicates that while eastern markets may offer an attractive outlet for small quantities of fresh clingstone peaches, they do not afford an outlet for any substantial proportion of the crop.

Drying has been and will probably continue to be of even less importance than fresh shipments as an outlet for clingstone peaches. This subject is discussed on page 33.

Principal Areas Producing Clingstone Peaches in California.—Most of the clingstone peaches produced in California are grown in the Sacramento and San Joaquin valleys. The relative distribution of the total acreage of clingstone peaches by counties in 1932 is shown in figure 4. Approximately 36 per cent of the total acreage in 1932 was in three

CLINGSTONE PEACH ACREAGE IN CALIFORNIA, 1932
(Bearing and Nonbearing)



County	Acres	Per cent of total
Sutter	15,780	24.6
Stanislaus	8,782	13.7
Tulare	5,998	9.4
San Joaquin	4,276	6.7
San Bernardino	4,266	6.7
Merced	4,150	6.5
Yuba	3,759	5.9
Butte	3,273	5.1
Riverside	2,449	3.8
Sacramento	2,097	3.3
Placer	1,921	3.0
Fresno	1,709	2.7
Madera	821	1.3
San Benito	776	1.2
Santa Clara	738	1.1
Kings	692	1.1
Los Angeles	591	0.9
Colusa	292	0.4
El Dorado	255	0.4
Tehama	236	0.4
Yolo	229	0.3
Contra Costa	224	0.3
Sonoma	110	0.2
Glenn	106	0.2
Others	486	0.8
Total	64,016	100.0

Fig. 4.—Most of the clingstone peaches are produced in the Sacramento and San Joaquin valleys.

Data from California Cooperative Crop Reporting Service, Sacramento.

Sacramento Valley counties—Sutter, Yuba, and Butte—and about 36 per cent was in four San Joaquin Valley counties—Stanislaus, Tulare, Merced, and San Joaquin. These seven counties contained about 72 per cent of the total acreage in the state, while Sutter County alone contained about 25 per cent of the total. The acreage of all varieties of clingstone peaches north of the Tehachapi in 1932 amounted to 56,697 acres, or 89 per cent of all acreage in the state.

Acreage and Production of Canning Clingstone Peaches, North of the Tehachapi.—Table 6 shows the estimated acreage north of the Tehachapi of Tuscans, New Midsummers, and Phillips in 1928, 1930, and 1932. The net decrease in total acreage of these three varieties between 1928 and 1930 amounted to 5,159 acres; 7,041 acres were removed and 1,882 acres were planted. Between 1930 and 1932 only 169 acres were planted while 13,329 acres were removed or abandoned. The net decrease, therefore, amounted to 13,160 acres. Most of the plantings since 1928 have been New Midsummers while most of the removals have been Tuscans and Phillips. Consequently, the total acreage of New Midsummers in 1932 was only 4 per cent smaller than in 1928, whereas the total acreage of Tuscans was 61 per cent smaller and the total acreage of Phillips 28 per cent smaller.

TABLE 6

Total Acreage of Principal Canning Varieties of Clingstone Peaches, North of Tehachapi, California, 1928, 1930, 1932

(Old Midsummer Clings, White Clings, and Levi Clings omitted)

Variety	Year		
	1928	1930	1932
	acres	*acres*	*acres*
Tuscans	16,931	13,710	6,655
New Midsummers	25,393	25,675	24,447
Phillips	25,687	23,467	18,590
Total	68,011	62,852	49,692

Sources of data:
California Canning Peach Growers Association and Cling Peach Control Committee.

Although there has been a large reduction in the total acreage of clingstone peaches north of the Tehachapi since 1928, the net decrease in bearing acreage has been relatively small. In 1928 there were 53,967 acres four years of age and older, while in 1932 there were 47,641 acres four years of age and older, which represents a net decrease in bearing acreage of only 6,326 acres. Thus, the removal of older trees during the past four years was offset to a considerable extent by the young trees coming into bearing.

The distribution of the 49,692 acres of Tuscans, New Midsummers, and Phillips in 1932 by ages of trees is shown in table 7. Large plantings occurred each year between 1920 and 1927 and were particularly heavy in 1922, 1923, and 1924. During these three years 44 per cent of the total acreage in 1932 was planted. These plantings came

TABLE 7

AGE AND ACREAGE OF TUSCANS, NEW MIDSUMMERS, AND PHILLIPS, NORTH OF TEHACHAPI, CALIFORNIA, 1932

Year planted	Age in 1932	Tuscans	New Mid-summers	Phillips	Total	Percentage of total
		acres	*acres*	*acres*	*acres*	*per cent*
1932	0	0	17	0	17	.....
1931	1	0	142	10	152	0.3
1930	2	10	1,198	75	1,283	2.6
1929	3	20	509	70	599	1.2
1928	4	30	1,006	337	1,373	2.8
1927	5	321	2,762	1,161	4,244	8.6
1926	6	74	2,220	995	3,289	6.6
1925	7	281	2,649	1,675	4,605	9.3
1924	8	387	3,238	1,786	5,411	10.9
1923	9	1,286	4,244	3,890	9,420	18.9
1922	10	1,149	2,846	3,053	7,048	14.2
1921	11	589	1,535	1,561	3,685	7.4
1920	12	893	539	1,147	2,579	5.2
1919	13	134	200	332	666	1.3
1918	14	165	362	378	905	1.8
1917	15	158	147	209	514	1.0
1916	16	162	199	299	660	1.3
1915	17	256	383	332	971	2.0
1914 and earlier	18 and older	740	251	1,280	2,271	4.6
Total		6,655	24,447	18,590	49,692	100.0

Source of data: Cling Peach Control Committee.

AVERAGE RELATION BETWEEN AGE OF CLINGSTONE-PEACH TREES AND YIELD PER ACRE OF NO. 1 FRUIT, NORTH OF TEHACHAPI, CALIFORNIA

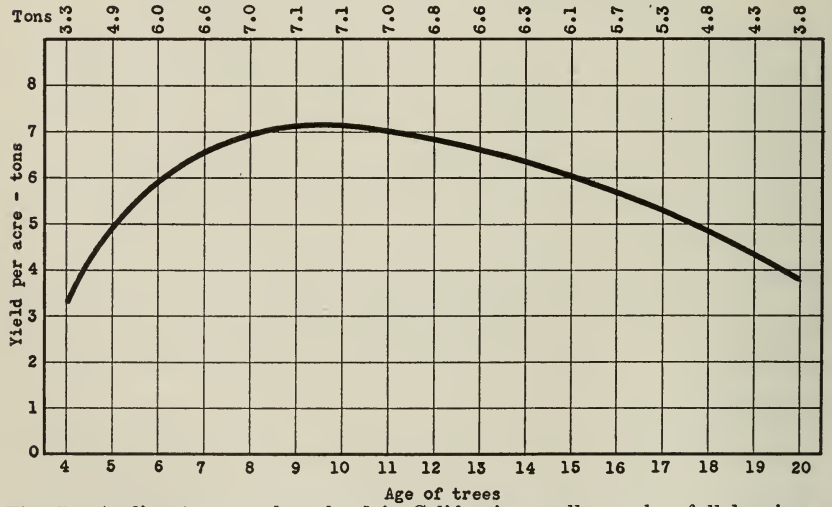


Fig. 5.—A clingstone-peach orchard in California usually reaches full bearing at nine or ten years of age.

Data calculated from records of yields per acre by age of trees on 20,480 acres, obtained during the four years 1928–1931 by the Cling Peach Control Committee.

into commercial production in 1926–1928 and account in a large measure for the difficulties that the peach industry has experienced during the past six years.

The average yields per acre of No. 1 clingstone peaches, north of the Tehachapi, at various ages are shown in figure 5. An orchard usually comes into commercial production at four years of age. The production of No. 1 fruit at that age, however, is light, amounting on the average to less than 4 tons per acre. During the next four or five years production increases rapidly. The peak of production usually comes in the ninth or tenth year. At that age the average orchard produces around 7 tons of No. 1 fruit per acre. After the tenth year there is ordinarily a gradual decline in yield per acre. In the twentieth year the yield per acre averages about 4 tons.

There is, of course, great variation among different orchards with respect to yields at various ages. The curve in figure 5 represents the typical situation north of the Tehachapi. Many growers have obtained much higher yields than those given here, while other growers have obtained much lower yields. Some orchards come into commercial bearing at three years of age and reach full production at seven years of age; other orchards do not come into commercial bearing until five years of age and do not reach full production until twelve or thirteen years of age. The bearing life of different orchards also varies greatly. Under very favorable conditions trees will produce relatively good yields until twenty-five or thirty years of age; under unfavorable conditions they may go out of production at twelve or fifteen years of age. Under average conditions the normal life is twenty years.

The quantity of canning clingstone peaches sold by growers north of the Tehachapi each year from 1921 to 1931 is shown in figure 6. The data for the years 1921–1929 represent the quantity canned. The data for 1930 and 1931 represent the quantity canned plus the quantity purchased by the Cling Peach Control Committee and left on the trees. From 1921 to 1930 there was a pronounced upward trend in production, rising from 104,000 tons to 338,000 tons. In 1931, however, there was no further increase; the trend remained at the same height as in 1930. With the removal of considerable bearing acreage in 1931, the trend in 1932 declined to 307,000 tons, 9 per cent below the trend in 1931.

During the next few years a further decrease in the trend of production of No. 1 Tuscans, New Midsummers, and Phillips is likely to occur. Plantings since 1928 have not been sufficient to offset the normal removal of trees due to old age. The present acreage is now at the peak of maximum average yield and as the orchards become older, a gradual

decrease in average yield per acre is to be expected. Because of the low prices paid growers in 1931 and 1932, many trees are likely to be taken out before they reach the age of twenty years. Considerable acreage is likely to be abandoned or neglected to such an extent that it will be very costly, if not impossible, to bring it back into good condition.

CANNING CLINGSTONE PEACHES PURCHASED, NORTH OF TEHACHAPI, CALIFORNIA, 1921–1931

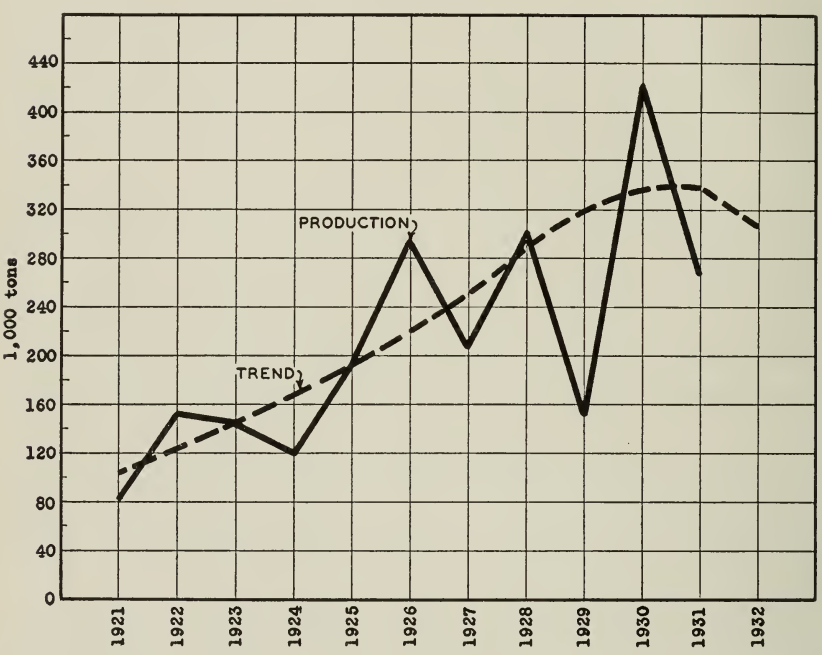


Fig. 6.—The trend of production of clingstone peaches in California during the next few years is likely to be downward; this is a marked contrast to the sharp upward trend which prevailed between 1921 and 1930.

Data from table 29.

In southern California there has been a definite downward trend in the production of clingstone peaches during the past four years as shown by the canned-pack statistics given in figure 7. The 395,000 cases of clingstone peaches canned in southern California in 1931 include some fruit grown north of the Tehachapi. The exact quantity, however, is not known.

The bearing acreage of clingstone peaches in southern California decreased about 34 per cent between 1928 and 1932. In 1928 the bearing acreage amounted to 10,779 acres and in 1932, 7,136 acres.

Canned Pack of Clingstone Peaches, Southern California, 1921–1931

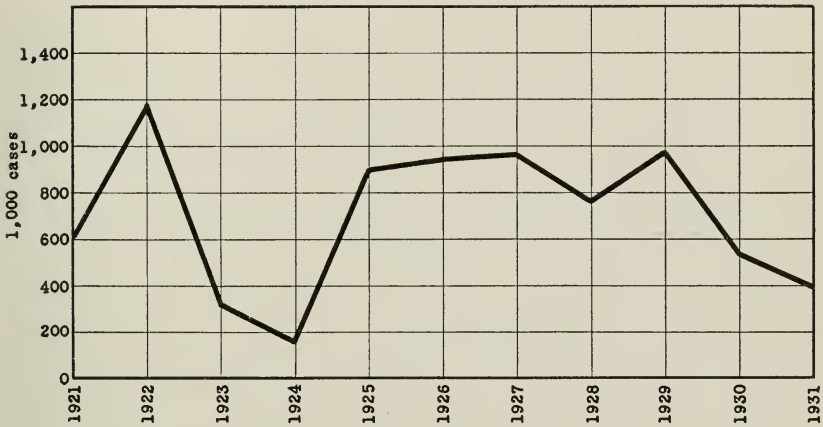


Fig. 7.—Since 1927 there has been a substantial decrease in the canned pack of clingstone peaches in southern California.

Data from table 29.

Relative Prices Paid Growers for No. 1 Clingstone Peaches and Index of Prices of Commodities Purchased by Growers, 1910–1931

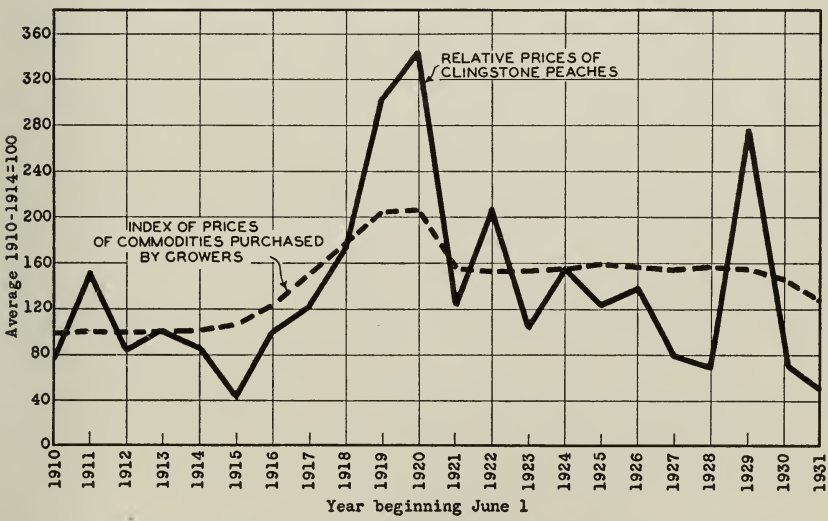


Fig. 8.—During recent years prices paid growers for clingstone peaches have been low as compared with the prices of commodities farmers buy for living and production purposes.

Data from table 31.

Prices Paid Growers for No. 1 Clingstone Peaches.—The average prices paid growers for No. 1 clingstone peaches from 1910 to 1931, expressed as percentages of the 1910–1914 average price, are shown by the solid line in figure 8. From 1910 to 1915 there was a downward trend in prices paid growers. Then came the World War inflation period and prices of canning peaches rose rapidly. Each year for five consecutive years prices were higher than in the preceding year. Costs of growing peaches also increased during this period but not as rapidly as the prices received by growers. The broken line in figure 8 represents the prices of commodities that farmers buy for living and production purposes. It is recognized, of course, that this general index of prices of commodities that farmers throughout the United States buy may not adequately represent the costs of producing peaches, but it is the best index available at the present time. In 1919 and 1920 the index of prices of commodities bought by growers averaged 106 per cent above its pre-war level; the prices growers received for canning peaches during those two years, however, averaged 224 per cent above the pre-war level. Prior to the World War, clingstone-peach growing had been one of the profitable agricultural industries in California as evidenced by the continuous plantings. In 1919 and 1920 it was enormously profitable. The high prices received for canning peaches in those two years relative to the cost of producing them provided the initial stimulus to the excessive planting which occurred in the years immediately following.

The precipitous drop in the price of canning peaches from the high level of 1920 was in part offset by reduction in costs. The index of prices farmers pay for commodities purchased for living and production purposes was about 25 per cent lower in 1921 than in 1920. From 1921 to 1929, however, there was no further decline. On the other hand, prices of canning peaches have experienced a sharp downward trend since 1921. The spread between the prices growers received and the prices they paid did not become serious, however, until 1927. From 1921 to 1926 the profits obtained from growing clingstone peaches, while not as large as in 1919 and 1920, were nevertheless substantial, and were much higher than could be obtained from most alternative enterprises. It was during this period that so many thousands of acres were planted to clingstone peaches.

From 1927 to 1931, with the exception of 1929 when the crop was very short, prices paid growers for clingstone peaches averaged less than $20.00 a ton as against an average of $41.00 a ton from 1921 to 1926, and an average of $29.00 a ton from 1910 to 1914. In 1930 and 1931 the prices would have been considerably below the $20.00 and $14.50 a ton

that were paid had the quantity canned not been limited by industry agreement. The low prices received during the past two years were partially offset by a reduction in costs of producing peaches. The index of prices of commodities farmers buy, however, was still 26 per per cent higher in 1931 than from 1910 to 1914, while the price farmers received for clingstone peaches in 1931 was 50 per cent below the 1910–1914 average. The marked reduction in the prices of clingstone peaches

Relative Prices Paid Growers for No. 1 Clingstone Peaches and Relative Prices Received by Canners for Canned Clingstone Peaches, 1910–1931

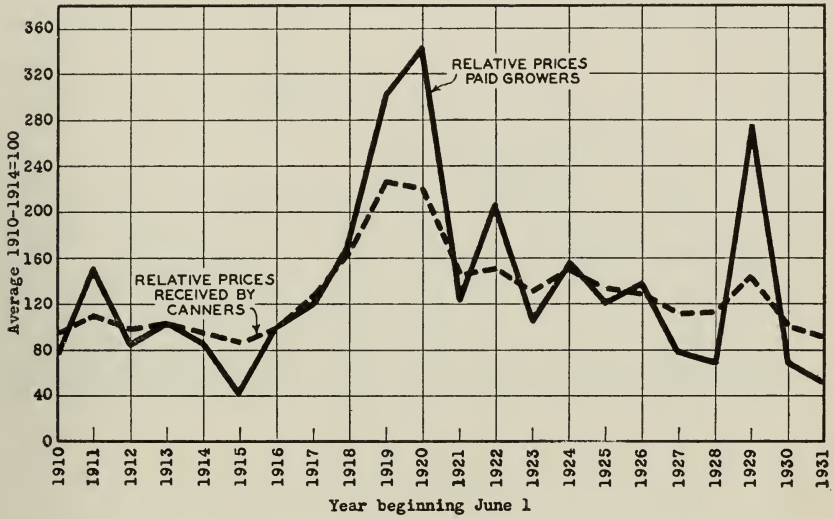


Fig. 9.—A small percentage change in the prices which canners receive for canned peaches results in a large percentage change in the prices paid growers.

Data from table 31.

since 1926 as compared with the costs of producing them has resulted in a cessation of planting, in the removal of many trees, and the loss of orchards by numerous growers.

Prices Received by Canners.—The prices paid growers for clingstone peaches are directly affected by the prices that canners are able to obtain for the finished products. In figure 9 the relative prices paid growers are shown by the solid line, the relative prices received by canners by the broken line. Two tendencies are apparent: first, that the movements of the two price series have been in the same general direction; and secondly, that the change in growers' prices has been much more pronounced than the change in canners' prices. A small increase in the price to canners results in a large increase in the price to growers, while

a small decrease in price to canners results in a large decrease in price to growers. The reason why canners' prices are more stable than growers' prices is that the price of peaches is only one of the costs that enter into the finished product. Prices of the other cost items, such as labor and cans, usually fluctuate but little from year to year. Since many of the costs of canning are relatively fixed, the entire change in prices of canned peaches from one year to another tends to be reflected

RELATIVE PRICES RECEIVED BY CANNERS FOR CANNED CLINGSTONE PEACHES AND ALL-COMMODITY INDEX OF WHOLESALE PRICES, 1910–1931.

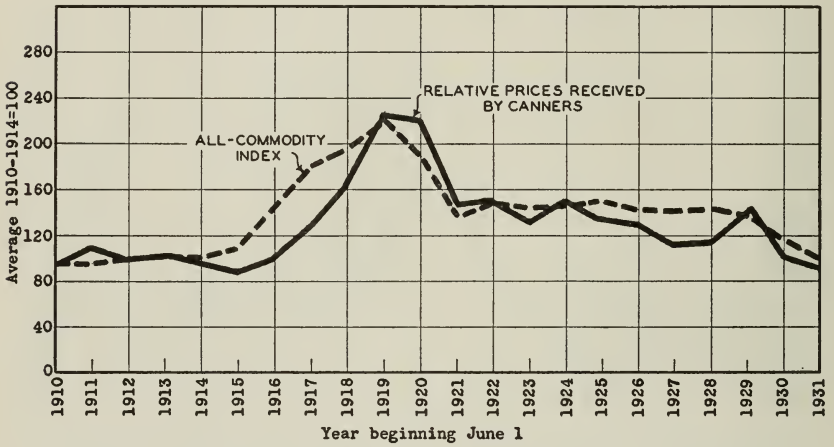


Fig. 10.—Prices which canners receive for canned peaches are influenced by the changes in the general price level.

Data from table 31.

in the prices of the raw product. From 1921 to 1928 the relative variation in growers' prices was 23 per cent while that of canners' prices was only 5 per cent.

The slowness with which prices of most of the cost items in canning changed as compared with the prices received for canned peaches was largely responsible for the very rapid rise in the prices paid growers from 1915 to 1920 and for the marked downward trends in growers' prices from 1910 to 1915 and from 1921 to 1931. The trend of canners' prices in 1930 was 26 per cent below that of 1921, while the trend of growers' prices was 60 per cent below. The decline in growers' prices would have been even greater, however, had it not been for a reduction in canners' margin. Between 1921 and 1930 canners' prices fell $1.10 a case which is equivalent to $50 a ton. During the same period growers' prices declined $30 a ton.

In figure 10, the relative prices received by canners from 1910–11 to 1931–32 are compared with the Bureau of Labor Statistics all-commodity index of wholesale prices. This index, while not an accurate measure of changes in the general price level, is useful as a rough indicator. Changes in the general price level are equivalent to changes in the value of money and tend to produce similar changes in the value of commodities and services. The pronounced rise in canners' prices from

Domestic Shipments, Exports, and Prices of Canned Peaches
1921–22 to 1931–32

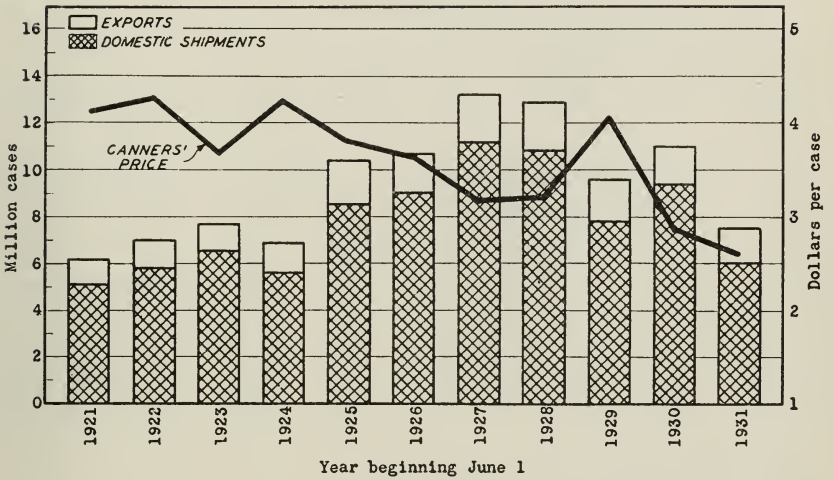


Fig. 11.—The downward trend in the price of canned peaches from 1921–22 to 1928–29 was caused mainly by the rapid increase in shipments.

Data on shipments from table 8, data on prices from table 31.

1915–16 to 1919–20 was caused mainly by the rise in the general price level, while the precipitous drop in canners' prices in 1920–21 was caused mainly by the sharp decline in the general price level.

Between 1921–22 and 1928–29 there was no significant change in the general price level, yet prices canners received declined materially. This downward trend in canners' prices was chiefly the result of increased supplies of canned peaches. In figure 11 the bars show the annual shipments of California canned peaches. These shipments were computed from the data on pack and carryover, which are given in table 8. Domestic shipments are represented by the cross-hatched portion of the bars in figure 11, exports by the open portion. During the eleven years, 1921–22 to 1931–32, an average of 83 per cent of the total shipments were sold in the United States, and 17 per cent were exported.

From 1921–22 to 1928–29 there was a substantial increase in both domestic shipments and exports. The absolute increase was much greater in domestic shipments than in exports; the relative increases, however, were about the same. The average annual shipments to all markets during the two years 1921–22 and 1922–23 amounted to 6,614,000 cases, as against an average of 13,083,000 cases during the two years of 1927–28 and 1928–29, an increase of 98 per cent. Consumers would not buy the

TABLE 8

PACK, CARRYOVER, SHIPMENTS, AND EXPORTS OF CALIFORNIA CANNED PEACHES, 1921–22 TO 1931–32

Year June–May	Pack	Carryover from previous year	Available for shipment	Carryover into following year	Shipments	Exports	Domestic shipments
	1	*2*	*3*	*4*	*5*	*6*	*7*
	*1,000 cases**	*1,000 cases**	*1,000 cases**	*1,000 cases**	*1,000 cases**	*1,000 cases**	*1,000 cases**
1921–22	5,633	920	6,553	326	6,227	1,108	5,119
1922–23	8,784	326	9,110	2,109	7,001	1,214	5,787
1923–24	7,158	2,109	9,267	1,575	7,692	1,147	6,545
1924–25	6,141	1,575	7,716	798	6,918	1,281	5,637
1925–26	10,143	798	10,941	574	10,367	1,856	8,511
1926–27	14,059	574	14,633	3,906	10,727	1,681	9,046
1927–28	10,813	3,906	14,719	1,516	13,203	2,040	11,163
1928–29	14,596	1,516	16,112	3,149	12,963	2,163	10,800
1929–30	8,100	3,149	11,249	1,677	9,572	1,727	7,845
1930–31	13,294	1,677	14,971	3,951	11,020	1,618	9,402
1931–32	8,421	3,951	12,372	4,845	7,527	1,469	6,058

* 2½-can basis. Includes both freestones and clingstones.

Sources of data:
Col. 1: Compiled by the Canners League of California.
Cols. 2 and 4: 1921–22 to 1924–25 compiled from records of canners. 1925–26 to 1931–32 compiled by the Canners League of California.
Col. 6: Compiled from U. S. Dept. Com. Monthly Summary of Foreign Commerce of the United States, monthly issues. Pounds were converted to cases on the basis of 45 pounds per case.

larger quantities offered for sale except at lower prices, and the lower prices which consumers paid resulted in lower prices to canners as shown by the solid line in figure 11.

In the past two years, 1930–31 and 1931–32, shipments of canned peaches averaged only 9,274,000 cases, 29 per cent below the average of 1927–28 and 1928–29. But despite these smaller shipments prices which canners received were also lower. The two chief causes of the relatively low prices of canned peaches during the past two years in comparison with the volume shipped were (1) the decline in the general price level, and (2) the decrease in the buying power of consumers.

As shown by the broken line in figure 10, the Bureau of Labor Statistics all-commodity index of wholesale prices declined from 138 (1910–1914 = 100) in 1929–30 to 100 in 1931–32. As long as the general price

level remains below the 1921–1929 average, it is not likely that shipments of canned peaches as large as those of 1927–28 and 1928–29 can be sold for as high prices as prevailed in those two years even though business activity and employment return to normal.

The pronounced decline in the buying power of consumers since 1929 has resulted in a sharp decrease in the demand for canned peaches. The extent of the decrease in the buying power of factory workers in this country as indicated by the Federal Reserve Board indexes of factory employment and factory pay rolls is shown in figure 12. For every 100

Federal Reserve Board Index of Factory Employment and Factory Pay Rolls in the United States, 1919–1932

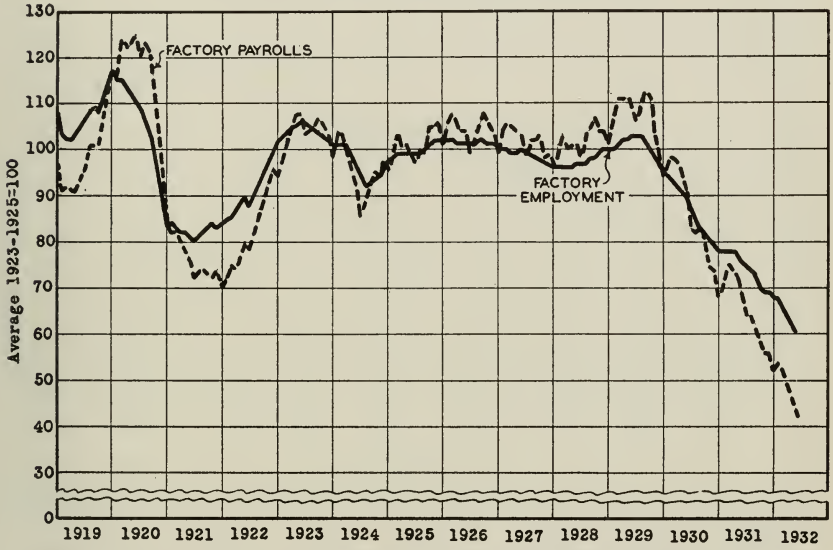


Fig. 12.—The low level of employment was mainly responsible for the decreased demand for canned peaches in 1930–31 and 1931–32.

Data from the Federal Reserve Bulletins.

people employed in factories in this country during the three years 1923–1925, only 81 people were employed in 1930–31 and only 70 people in 1931–32. The money income of these workers as measured by the index of factory pay rolls, which is represented by the broken line in figure 12, declined even more rapidly than the number of people employed. For the twelve months June, 1931 to May, 1932 the index of factory pay rolls averaged 58 as against the three-year 1923–1925 average of 100. During the past three years the buying power of people engaged in agriculture experienced an even greater reduction than that of factory workers. The gross income from agricultural production in 1931

was 42 per cent below that of 1929. The net farm income unquestionably declined proportionately more than the gross farm income. Although there were some reductions in the expenses of production, they were not nearly sufficient to counterbalance the drop in gross incomes.[5]

The recovery in the demand for canned peaches from the present unusually low levels depends largely upon improvement in the buying power of consumers. The entire world is now in the trough of a major

ESTIMATED TREND OF DEMAND FOR CANNED PEACHES IN THE UNITED STATES, 1921–22 TO 1929–30

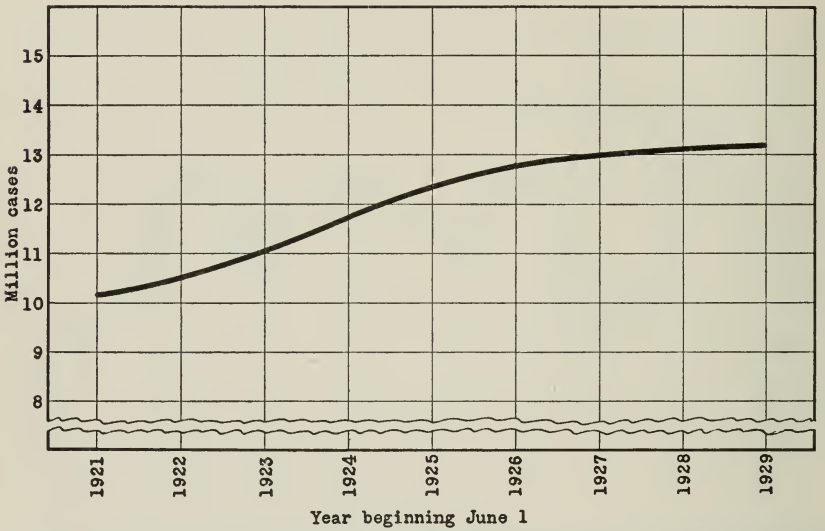


Fig. 13.—The trend of demand for canned peaches in the United States increased rapidly from 1921–22 to 1926–27, but from 1926–27 to 1929–30 increased only slowly.

From: Wellman, H. R. Factors that affected the annual average prices of canned clingstone peaches, 1921–22 to 1930–31. California Agr. Ext. Serv. June, 1931. (Mimeo.)

depression. When improvement will begin, how rapidly it will develop, and what forces will bring it about, are all uncertain. It seems evident, however, that no immediate substantial improvement is in prospect and that recovery to normal may require several years rather than a few months.

Trend of Demand for Canned Peaches.—The trend of demand for California canned peaches from 1921–22 to 1929–30 is shown by the solid curve in figure 13. This curve represents the estimated quantity of canned peaches that canners could have sold each year at a price of $3.25 a case f.o.b. cannery, if the buying power of consumers and the

[5] United States Department of Agriculture. Yearbook of Agriculture 1932:13. 1932.

supplies of competing fruits had remained constant. From 1921–22 to 1926–27 the trend of demand rose from 10,120,000 cases to 12,830,000 cases, an average increase of 542,000 cases a year. Since 1926–27, however, the trend of demand has increased at the rate of only 120,000 cases a year. Thus three years before the beginning of the present business depression, a definite slowing down occurred in the rate of increase in the trend of demand.

As closely as can be determined the trend of demand for canned peaches in the United States increased from 10,650,000 cases in 1926–27 to 11,000,000 cases in 1929–30, an increase of 3.3 per cent. According to Whelpton, the population of the United States on January 1, 1927 was 118,594,000 persons and on January 1, 1930, 122,535,000 persons, an increase of 3.3 per cent.[6] The evidence, therefore, is that there has been no increase in the per-capita demand for canned peaches in this country since 1926–27.

During the coming years the growth in population in the United States itself is not likely to result in any large increase in the demand for canned peaches. There is definite evidence of a material decline in the rate of population growth in this country. The gain in population in 1930 amounted to only 1,110,00 persons as against 1,673,000 persons in 1925 and 1,948,000 persons in 1920. Prospects are that the population in 1940 will be only 7.5 per cent to 10.0 per cent larger than in 1930, with the smaller percentage increase being the more probable and the larger one the upper limit.[7] Thus, unless the per-capita demand for canned peaches is increased, it may reasonably be expected that the trend of demand in the United States by 1939–40 will be only 825,000 cases above the trend in 1929–30.

Competition of Other Canned Fruits.—Canned pears, pineapples, and apricots probably compete more directly with canned peaches in the consuming markets than do canned cherries, plums, apples, or berries. The California apricot pack, Pacific Coast pear pack, and Hawaiian pineapple pack are given in table 9. Although the trend in the apricot pack has risen only slightly since 1921, the pear and pineapple packs have increased enormously. The combined packs of the three fruits averaged 9,279,000 cases in 1921–1923 as against an average of 18,531,000 cases in 1929–1931, an increase of 99.7 per cent.

In order to dispose of the much larger quantities offered for sale it has been necessary to reduce prices materially. Canners' opening prices

[6] Whelpton, P. K. Trends in population increase and distribution during 1920–1930. Amer. Jour. Sociology 36(6):867. 1931.

[7] Whelpton, P. K. Trends in population increase and distribution during 1920–1930. Amer. Jour. Sociology 36(6):869. 1931.

on these three fruits are given in table 9. Although the opening prices have not always been the same as the actual prices which canners have received, they do give a reasonable indication of the trend of prices over a period of years. The 1930 opening prices of canned apricots were 17 per cent below the 1921–1923 average, canned pineapples 23 per cent below, and canned pears 30 per cent below. The 1931 opening prices were from $0.20 to $0.35 a dozen lower than in 1930. In October, 1931,

TABLE 9

CANNED PACK AND OPENING PRICES OF APRICOTS, PEARS, AND PINEAPPLES, 1921–1931

Year	Canned pack				Canners' opening prices per dozen No. 2½ cans		
	California apricots	Pacific Coast pears	Hawaiian pineapples	Total	Choice apricots	Choice pears	Fancy sliced pineapples
	1	*2*	*3*	*4*	*5*	*6*	*7*
	cases	*cases*	*cases*	*cases*	*dollars*	*dollars*	*dollars*
1921	1,150,514	1,248,157	5,262,503	7,661,174	2.25	3.05	2.25
1922	3,569,918	2,546,294	4,770,239	10,886,451	2.60	3.15	2.90
1923	1,562,298	1,830,874	5,895,747	9,288,919	2.05	2.55	3.00
1924	2,050,405	2,195,913	6,825,904	11,072,222	2.35	2.90	2.60
1925	2,196,680	3,591,444	8,728,580	14,516,704	2.30	3.20	2.15
1926	3,390,418	3,364,047	8,939,590	15,694,055	2.45	2.40	2.35
1927	3,116,713	2,748,719	8,879,252	14,744,684	2.45	2.50	2.10
1928	2,097,070	4,314,876	8,663,056	15,075,002	2.30	2.40	2.20
1929	4,211,471	4,387,913	9,211,376	17,810,760	2.55	3.15	2.35
1930	2,069,471	4,361,807	12,672,296	19,103,574	1.90	2.05	2.10
1931	2,096,340	3,775,730	12,807,291	18,679,361	1.65	1.85	1.75

Sources of data:
Cols. 1 and 3: from Canners League of California.
Col. 2: from Canners League of California and Northwest Canners Association.
Cols. 5, 6, and 7: based on canners' quotations as reported in the California Fruit News.

the list price of No. 2½ fancy pineapples was reduced to $1.35 a dozen, $0.50 a dozen below the opening price. However, the list price was raised to $1.40 a dozen in January, 1932, and to $1.50 a dozen in March, 1932. During 1931–32, list prices on canned apricots and canned pears were also reduced materially. In May, 1932, No. 2½ Choice apricots were quoted at $1.35 a dozen and No. 2½ Choice pears at $1.55 a dozen.

During the coming years canned pineapples and canned pears are likely to offer keen competition to canned peaches in the consuming markets. The estimated production of pineapples in the Hawaiian Islands in 1931 was about 4,000,000 cases in excess of the 1931 pack. Only one-half of the Bartlett-pear acreage in California is now in full bearing, while in Oregon and Washington a substantial proportion of the trees has not yet reached maximum production.

Foreign Markets for California Canned Peaches.—The United Kingdom is the most important foreign market for California canned peaches, taking on the average about 77 per cent of our total exports. For the five years 1925–1929, Canada ranked second in importance followed by Cuba, France, and the Netherlands in the order named. Table 10 shows the 1925–1929 average exports of canned peaches from the United States by countries of destination.

TABLE 10

United States Exports of Canned Peaches by Countries of Destination, Average 1925–1929, Annual 1925-1930

Country of destination	Calendar year							
	Average 1925–1929		1925	1926	1927	1928	1929	1930
	cases	*per cent*	*cases*	*cases*	*cases*	*cases*	*cases*	*cases*
United Kingdom	1,417,905	76.7	1,547,082	1,177,849	1,333,454	1,584,787	1,446,354	1,240,289
Canada	130,261	7.0	77,232	89,364	122,910	173,087	188,714	123,001
Cuba	47,247	2.6	72,097	43,695	56,967	37,244	26,233	21,250
France	46,091	2.5	41,222	33,281	26,398	64,308	65,247	24,733
Netherlands	32,714	1.8	22,090	12,483	36,972	47,393	44,634	34,219
Germany	23,573	1.3	3,882	10,699	18,086	39,364	45,833	19,694
Sweden	17,549	0.9	10,000	11,308	15,337	27,017	24,083	10,186
New Zealand	14,718	0.8	20,025	1,143	9,819	29,483	13,118	3,859
British India	8,889	0.5	9,032	7,405	8,432	9,384	10,191	14,729
Belgium	9,103	0.5	8,390	6,679	5,829	10,802	13,815	10,380
Denmark	7,543	0.4	4,173	8,180	7,823	8,951	8,589	6,700
Others	92,420	5.0	68,088	77,895	95,234	106,782	114,098	78,753
Total	1,848,013	100.0	1,883,313	1,479,981	1,737,261	2,138,602	2,000,909	1,587,793

Source of data:
U. S. Dept. of Com. Foreign Commerce and Navigation of the United States, annual issues. Pounds were converted to cases on the basis of 45 pounds per case.

Exports of canned peaches from the United States to the United Kingdom increased materially between 1923–24 and 1927–28, as shown by the black portion of the bars in figure 14. In 1923–24 our exports to that country amounted to 883,000 cases, in 1927–28 to 1,571,000 cases, an increase of 78 per cent. In 1928–29, exports were only slightly smaller than in 1927–28 but in 1929–30 and 1930–31 they were substantially smaller. The high prices of California canned peaches in 1929–30 were mainly responsible for the decreased exports in that year. In 1930–31, however, the principal cause of the relatively low exports was the depressed buying power of the British consumers and the increased supply of canned peaches from Australia.

Exports of canned peaches from Australia to the United Kingdom are represented by the open portion of the bars in figure 14. During the three years 1923–24 to 1925–26, Australia exported an average of

80,000 cases to the United Kingdom as against an average of 288,000 cases during the three years 1928–29 to 1930–31.

Virtually all of the United Kingdom imports of canned peaches come from the United States and Australia. The combined imports from these two countries into the United Kingdom almost doubled between 1923–24 and 1928–29. A part of this large increase in the consumption

EXPORTS OF CANNED PEACHES TO THE UNITED KINGDOM FROM THE UNITED STATES AND AUSTRALIA, 1923–24 TO 1930–31

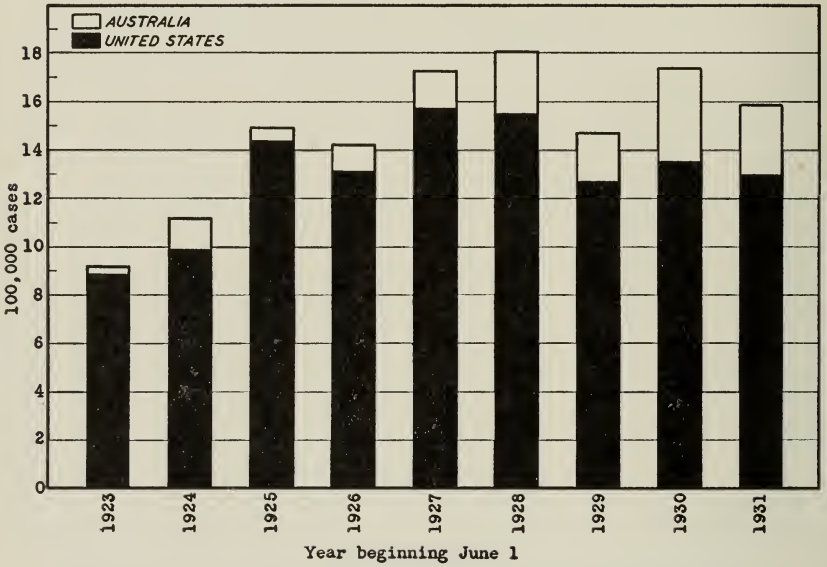


Fig. 14.—In the United Kingdom there is considerable competition between California and Australian canned peaches.

Data from table 11.

of canned peaches in the United Kingdom was the result of lower prices, a part the result of increased demand. Prices which California canners received for canned peaches exported to the United Kingdom experienced about the same decline as the prices received for canned peaches sold in the United States. This decline in prices, while partly responsible for the increased consumption, was not sufficiently great, however, to cause the virtual doubling of consumption. There has been a real increase in the demand for canned peaches in the United Kingdom since 1923–24. During the past two years, however, the trend of demand has not increased as rapidly as it did between 1923–24 and 1928–29. The actual demand for canned peaches in the United Kingdom in 1930–31

TABLE 11

United Kingdom Imports of All Canned Fruits, and United States and Australian Exports of Canned Peaches to the United Kingdom, 1923–24 to 1930–31

Year	United Kingdom imports of all canned fruits	Exports of canned peaches to the United Kingdom from		
		United States	Australia	Total United States and Australia
	1	*2*	*3*	*4*
	1,000 cases	*1,000 cases*	*1,000 cases*	*1,000 cases*
1923–24	4,265	883	39	922
1924–25	5,609	986	133	1,119
1925–26	6,555	1,429	67	1,496
1926–27	5,990	1,301	121	1,422
1927–28	6,107	1,571	163	1,734
1928–29	6,814	1,544	260	1,804
1929–30	6,637	1,262	210	1,471
1930–31	6,883	1,348	393	1,741
1931–32	7,545	1,292	300	1,592

Sources of data:

Col. 1: Dept. of Customs and Excise. Accounts Relating to the Trade and Navigation of the United Kingdom. Data reported in hundredweight of 112 pounds. Pounds converted to cases on the basis of 45 pounds per case. Year is from July to June.

Col. 2: U. S. Dept. Com. Monthly Summary of Foreign Commerce of the United States, monthly issues. Pounds were converted to cases on the basis of 45 pounds per case. Year is from June to May.

Col. 3: Compiled by M. E. Brooding, California Packing Corporation. Year is from June to May.

TABLE 12

Canadian Imports of Canned Peaches and Apricots by Countries of Origin, 1922–23 to 1931–32

Year: April-March	Total	United States	Australia	Others
	cases	*cases*	*cases*	*cases*
1922–23	46,329	46,291	.....	.....
1923–24	39,200	39,200	.....	.....
1924–25	74,065	74,060	.....	5
1925–26	90,586	90,582	4	0
1926–27	118,037	106,887	11,137	13
1927–28	174,617	170,008	4,600	9
1928–29	246,562	222,399	24,162	1
1929–30	277,286	219,797	57,417	72
1930–31	186,347	102,228	83,055	1,064
1931–32	162,441	24,922	137,460	59

Source of data: Canada Bur. Statis. Quarterly reports of the trade of Canada.

and 1931–32 was much below the trend, just as it was in the United States. The present business depression is world-wide, and the effects of the depression upon the buying power of consumers are fully as pronounced in the United Kingdom as in the United States. In 1931–32 the market for California canned peaches in the United Kingdom was further restricted by the reduction in the value of the English pound sterling. In September, 1931, Great Britain went off the gold standard and the value of the pound sterling in terms of United States dollars declined about 20 per cent.

Australian canned peaches imported into the United Kingdom are accorded a preferential rate of one-half the general rate which prevails on canned peaches imported from the United States. The general rate on canned peaches in thick syrup is 6s. 10½d. per cwt. (112 pounds) which, with exchange at par, is equivalent to 1.5 cents a pound.

In the United Kingdom, as in the United States, canned peaches meet with considerable competition from other canned fruits. The average annual imports of all canned fruits into the United Kingdom during the five years 1926–27 to 1930–31 amounted to 6,486,000 cases of which canned peaches constituted only 25 per cent. In 1930–31 imports of all canned fruits amounted to 6,883,000 cases as against 4,265,000 cases in 1923–24, an increase of 61 per cent (table 11).

Not only is Australia the most important competitor of the United States in the United Kingdom, but is likewise our most important competitor in Canada. The Canadian imports of canned peaches and apricots by countries of origin from 1922–23 to 1931–32 are given in table 12. Canned peaches and canned apricots are not separately reported in the Canadian import statistics. Records of the exports of these two fruits from the United States and Australia to Canada indicate, however, that from 85 to 90 per cent are canned peaches. Prior to 1926–27 all of the Canadian imports of canned peaches came from this country. In 1930–31, however, the United States supplied only 55 per cent, and in 1931–32 only 15 per cent. In 1925 Canada and Australia entered into a treaty whereby imports of canned peaches from Australia into Canada were accorded preferential treatment with respect to import duties. The Canadian import duty on Australian canned peaches is now 1 cent a pound; whereas the import duty on canned peaches from this country is 5 cents a pound.[8]

[8] This rate became effective August, 1931. Prior to that date the rate on United States canned peaches was 2.75 cents a pound and on Australian canned peaches 0.50 cents a pound.

DRIED PEACHES

Kinds of Peaches Dried.—Practically all of the peaches used for drying are freestone varieties, mainly Muirs and Lovels. Muirs are used almost entirely for drying, but Lovels are also shipped fresh and in past years have been canned. Some experimental work in the drying of clingstone varieties was begun several years ago, but it was not until 1930 that commercial drying was undertaken. It is estimated that in 1931 about 8,100 tons of clingstones were dried. The refusal of canners to purchase any fruit except No. 1 Tuscans, Phillips, and New Midsummers, and the low prices received for clingstones shipped to eastern markets encouraged some growers to dry a part of their fruit. Furthermore, the very low prices at which clingstones could be purchased for drying induced operators of commercial dehydrators to buy some fruit for this purpose.[9] However, it has not yet been demonstrated that drying will offer a profitable outlet for large quantities of clingstone peaches or that dried clingstone peaches will become a serious competitor of dried freestones in the markets. The cost of drying clingstones is considerably above that of drying freestones. Clingstones are dehydrated which is a more expensive process than sun-drying, the common practice with freestones. It also is more expensive to pit clingstones. In addition, it is usually necessary to peel clingstones, an operation not performed with freestones. The drying ratio is also considerably higher with clingstones than with the principal varieties of freestones.

Utilization of California Freestone Peaches.—The annual production of freestone peaches in California from 1920 to 1931 is represented by the total length of the bars in figure 15. During this period there has been a downward trend in production. The average production for the four years 1928–1931 amounted to 192,000 tons as against an average of 228,000 tons for the four years 1920–1923, a decrease of 16 per cent. Practically all of this decline has been reflected in a reduction of freestones used for canning, which are represented by the open portion of the bars in figure 15. During the four years 1920–1923, an average of 31,000 tons of freestones was used for canning, whereas during the four years 1928–1931, an average of only 4,350 tons was canned. The output of dried peaches, represented by the black portion of the bars, and the shipments of fresh peaches, represented by the cross-hatched portion, have experienced no significant upward or downward trend

[9] About 700 tons of clingstone peaches were sold to commercial dehydrators in 1931 by the Cling Peach Control Committee at a price of $6.00 a ton.

during the past decade. If the downward trend in total production of freestone peaches in California continues, however, the output of either dried or fresh peaches or both will tend downward.

Age Distribution of Freestone-Peach Acreage in California.—The available data on the age distribution of freestone-peach acreage in California, which are given in table 13, indicate that a further decline in the trend of production of freestone peaches in the state is in prospect during the next few years. In 1929 about 90 per cent of the total acreage was in bearing, and only 10 per cent was nonbearing. Furthermore 64

UTILIZATION OF FREESTONE-PEACH PRODUCTION, CALIFORNIA, 1920–1931

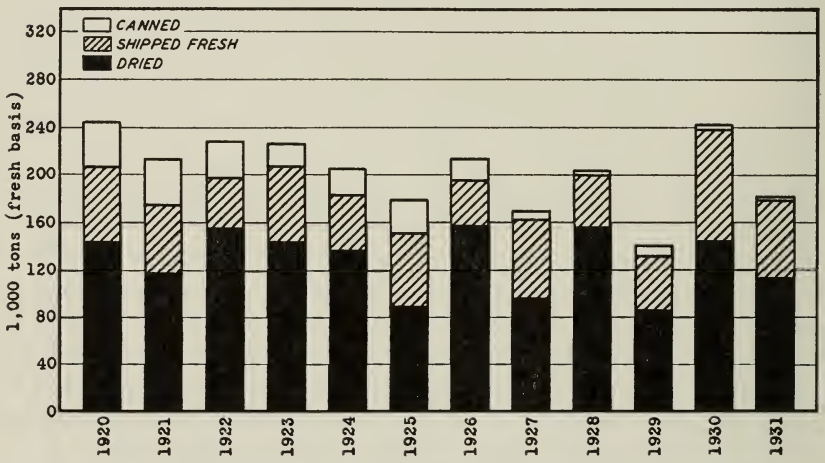


Fig. 15.—Virtually all of the decrease in freestone-peach production in California since 1920 has been in the volume canned.

Data from table 32.

per cent of the total acreage in that year was eleven years of age and older. Since the average commercial life of a peach tree is only about twenty years, it is evident that a considerable decrease in bearing acreage due to old age may be expected. Plantings of freestone peaches during recent years have been small and the number of young trees now in the ground is not sufficient to replace the loss that will normally occur in the old trees. A considerable part of this prospective decline in acreage is likely to be in the principal drying-peach varieties, since in 1929 about 78 per cent of the acreage of Muirs and about 61 per cent of the acreage of Lovels were eleven years of age and older.

United States Production and Exports of Dried Peaches.—California production of dried peaches, which constitutes the total national production of this fruit, is represented by the total length of the bars in

figure 16. Production has fluctuated widely from year to year, but no marked upward or downward trend during the past eleven years is apparent.

The United States exports of dried peaches from 1921–22 to 1931–32 are represented by the open portion of the bars in figure 16. The average annual exports during these eleven years amounted to 3,600 tons, which was 15 per cent of the average annual production. During this same period there has been no definite upward or downward trend in the volume exported. The variation in exports from year to year, however, has been considerable.

TABLE 13

Age Distribution of Freestone-Peach Acreage, California, 1929

Age of trees in 1929	Muirs	Lovels	Other varieties	All varieties
	per cent	*per cent*	*per cent*	*per cent*
1 and 2	4.2	4.2	10.4	6.9
3 and 4	2.8	5.1	8.0	5.8
5 and 6	4.3	9.7	11.1	8.8
7 and 8	6.8	12.4	9.7	9.5
9 and 10	4.7	7.2	4.0	5.0
11 and older	77.8	61.4	56.8	64.0
Total	100.0	100.0	100.0	100.0

Source of data: California Cooperative Crop Reporting Service, Sacramento.

Foreign Markets for Dried Peaches.—The volume of dried peaches exported from the United States to various foreign countries is shown in table 15. For years Canada, Germany, and the United Kingdom have been the most important foreign buyers of California dried peaches. During the five years 1925–1929 these countries took 62.7 per cent of our total exports, as against 79.5 per cent in 1910–1914. Between the two five-year periods 1910–1914 and 1925–1929, the proportion of the total exports going to Canada has decreased from 42.4 per cent to 26.8 per cent; while the proportion going to Germany has decreased from 29.1 per cent to 24.2 per cent. On the other hand, the proportion going to the United Kingdom has increased from 8.0 per cent to 11.7 per cent. Several countries, such as Sweden, Finland, Denmark, and Italy, which before the World War bought only a few tons of dried peaches from the United States, now buy substantial quantities. The proportion of the total United States dried-peach exports going to Europe increased from 48.6 per cent in 1910–1914 to 63.6 per cent in 1925–1929.

In the United Kingdom and to a minor extent in Canada, California dried peaches come in competition with those produced in Australia

UNITED STATES PRODUCTION AND EXPORTS OF DRIED PEACHES, 1921–22 TO 1931–32

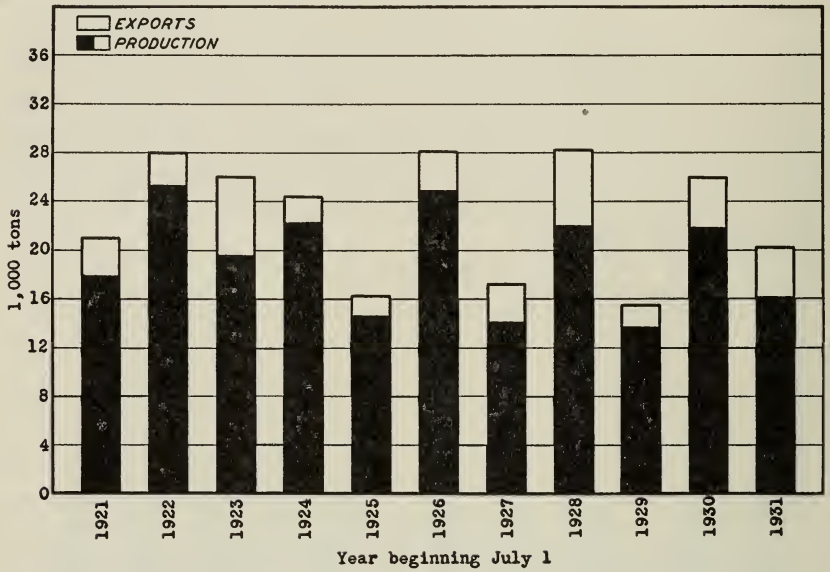


Fig. 16.—On the average about 15 per cent of our dried peaches are exported.

Data from table 14.

TABLE 14

UNITED STATES PRODUCTION AND EXPORTS OF DRIED PEACHES, 1921–22 TO 1930–31

Year: July–June	Production	Exports	Production minus exports	Percentage exported
	1	*2*	*3*	*4*
	tons	*tons*	*tons*	*per cent*
1921–22	21,000	3,130	17,870	14.9
1922–23	28,000	2,793	25,207	10.0
1923–24	26,000	6,487	19,513	25.0
1924–25	24,500	2,334	22,166	9.5
1925–26	16,200	1,675	14,525	10.3
1926–27	28,200	3,484	24,716	12.4
1927–28	17,230	3,271	13,959	19.0
1928–29	28,200	6,218	21,982	22.0
1929–30	15,500	1,923	13,577	12.4
1930–31	26,000	4,241	21,759	16.3
1931–32	20,300	4,245	16,055	20.9

Sources of data:
Col. 1: from table 30, col. 4.
Col. 2: from U. S. Dept. Com. Monthly Summary of Foreign Commerce of the United States, monthly issues.

and the Union of South Africa. There is no duty on dried peaches imported into the United Kingdom. In Canada, the duty on dried peaches from the United States is 25 per cent ad valorem. Dried peaches from Australia, however, are admitted free.

Prices of Dried Peaches.—The average f.o.b. prices of dried peaches from 1910 to 1931, as represented by packers' quotations on Choice Muirs in 25-pound boxes, are expressed as percentages of the 1910–1914

TABLE 15

United States Exports of Dried Peaches by Countries of Destination, Averages 1910–1914 and 1925–1929, Annual 1925–1930

Country of destination	Fiscal year, average 1910–1914		Calendar year							
			Average 1925–1929		1925	1926	1927	1928	1929	1930
	tons	*per cent*	*tons*	*per cent*	*tons*	*tons*	*tons*	*tons*	*tons*	*tons*
Canada	1,195	42.4	909	26.8	1,037	800	756	1,179	775	239
Germany	820	29.1	821	24.2	270	625	901	1,259	1,051	857
United Kingdom	226	8.0	395	11.7	243	427	492	476	337	672
France	111	3.9	284	8.4	109	101	153	534	522	110
Italy	18	0.6	164	4.8	34	35	104	324	323	42
Netherlands	126	4.5	158	4.7	49	147	167	250	178	617
Argentina	48	1.7	114	3.3	91	94	63	160	161	122
Denmark	13	0.5	110	3.2	49	133	95	181	89	19
Finland	5	0.2	94	2.8	54	60	87	144	127	77
Sweden	20	0.7	72	2.1	82	51	114	74	39	109
Belgium	32	1.1	58	1.7	42	68	46	86	48	311
Mexico	29	1.0	38	1.1	34	31	38	44	42	42
Others	178	6.3	169	5.2	112	95	242	194	201	102
Total	2,821	100.0	3,386	100.0	2,206	2,667	3,258	4,905	3,893	3,319

Source of data:
U. S. Dept. of Commerce. Foreign Commerce and Navigation of the United States, annual issues.

average price. These relative prices are shown by the solid line in figure 17. From 1910 to 1915 there was a downward trend in prices. Beginning in 1916, however, and continuing until 1919, prices of dried peaches, in sympathy with the prices of all commodities, which are represented by the broken line in figure 17, rose rapidly. During this period the rise in the prices of dried peaches was much greater than the rise in the prices of all commodities, but in 1920 and 1921 the decline in the prices of dried peaches was more rapid than the decline in the prices of all commodities. From 1921 to 1929 prices of all commodities remained stable. Prices of dried peaches fluctuated widely from year to year, largely as a result of changes in the size of the crop. There was, however, no downward trend in prices. During this period most of the deciduous fruits in California were characterized by an upward trend

RELATIVE PRICES OF DRIED PEACHES AND ALL-COMMODITY INDEX OF WHOLESALE PRICES, 1910–1931

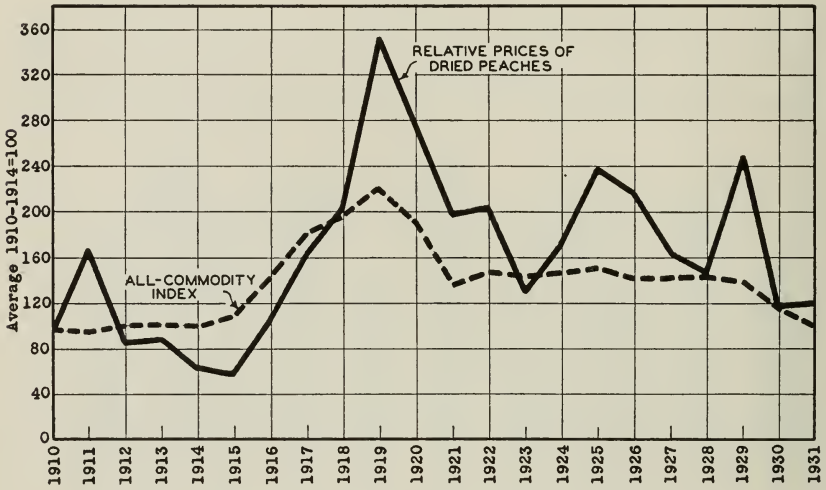


Fig. 17.—There has been no downward trend in the prices of dried peaches during the past decade.

Data from table 31.

UNITED STATES HARVESTED PRODUCTION OF FRESH PEACHES, 1920–1931

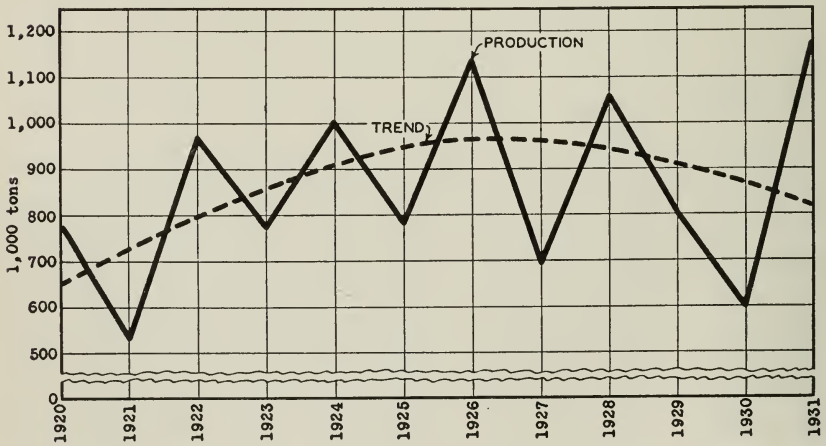


Fig. 18.—The peak in the trend of fresh-peach production in the United States was reached in 1926.

Data from table 27, col. 4.

in production and a downward trend in prices. Dried peaches were one of the few exceptions.

The low price of dried peaches in 1930 is chiefly accounted for by the large production in that year, by the decline in the general price level, and by the low buying power of consumers both in this country and abroad. In 1931 the production of dried peaches in California was substantially below that of 1930. Prices, however, were only slightly higher. The influence of the smaller production upon the price was largely offset by further declines in the general price level and in the buying power of consumers.

FRESH PEACHES

Trend of Fresh-Peach Production, United States.—The annual harvested production of fresh peaches in the United States from 1920 to 1931 is shown in figure 18. During the first seven years of this period there was a substantial upward trend in production, rising from 650,000 tons in 1920 to 960,000 tons in 1926, an increase of 48 per cent. The peak of fresh-peach production was reached in 1926 and since then the trend has been downward. In 1931 the trend was 14 per cent below that of 1926. The actual production in 1931, however, was considerably above the trend. In that year weather conditions throughout the principal peach-producing states, with the exception of California, were favorable to high yields per acre.

California Interstate Shipments of Fresh Peaches.—Although California ranks second in the production of fresh peaches in the United States, being exceeded only by Georgia, the volume produced in this state constitutes only a small part of the total national crop. During the five years 1926–1930, shipments of fresh peaches from California averaged 3,282 cars a year, as against an average of 32,900 cars for the United States as a whole.

The annual shipments from California are shown in the lower part of figure 19, shipments from all other states in the upper part. From 1921 to 1926 the trend of California interstate shipments was downward. This was a period of rapidly increasing shipments from other states. In 1921 the trend of shipments from other states was at 23,500 cars, in 1926 at 34,000 cars, an increase of 45 per cent. This increased competition from other states caused a gradual contraction in the markets for California fresh peaches. Since 1926 the trend of carlot shipments from other states has been downward,[10] and as a result California growers have been able to expand their eastern shipments.

[10] The decline in the trend of carlot shipments has been more rapid than the decline in the trend of production because of the increase in truck shipments.

UNITED STATES CARLOT SHIPMENTS OF FRESH PEACHES, 1921–1931

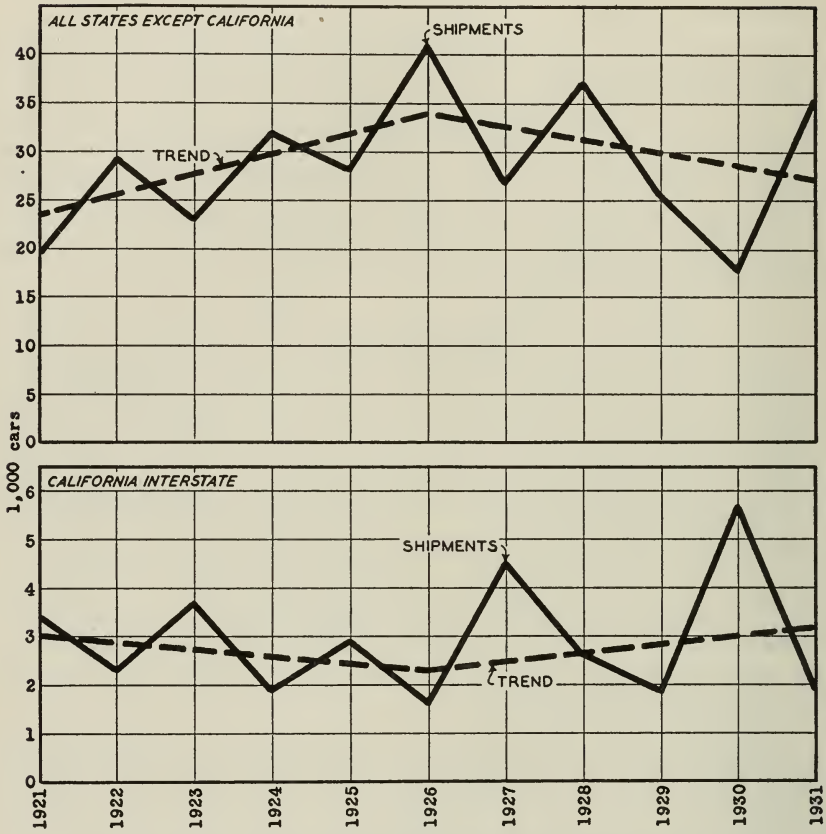


Fig. 19.—The volume of fresh peaches shipped from California is influenced by the shipments from other states.

Data from table 33.

A secondary cause of the upward trend of California interstate shipments since 1926 has been the increase in shipments of fresh clingstone peaches resulting from the low prices paid growers for canning clingstones. From 1922 to 1926 an average of 32,900 boxes of clingstone peaches was sold on the Chicago auction market; during the five years, 1927–1931, sales averaged 84,203 boxes.

That the volume of fresh peaches shipped from other states has an important effect upon California interstate shipments is also indicated by the fluctuations in shipments from year to year. From 1921 to 1931, with the single exception of 1929 when the crop in this state was very short, an increase in shipments from other states has been accompanied

by a decrease in shipments from California, and conversely a decrease in shipments from other states has been accompanied by an increase in shipments from California.

The average weekly movement of fresh peaches from California is shown in figure 20. Shipments normally begin the first week in June

Weekly Carlot Shipments of Fresh Peaches from California, Average 1926–1930

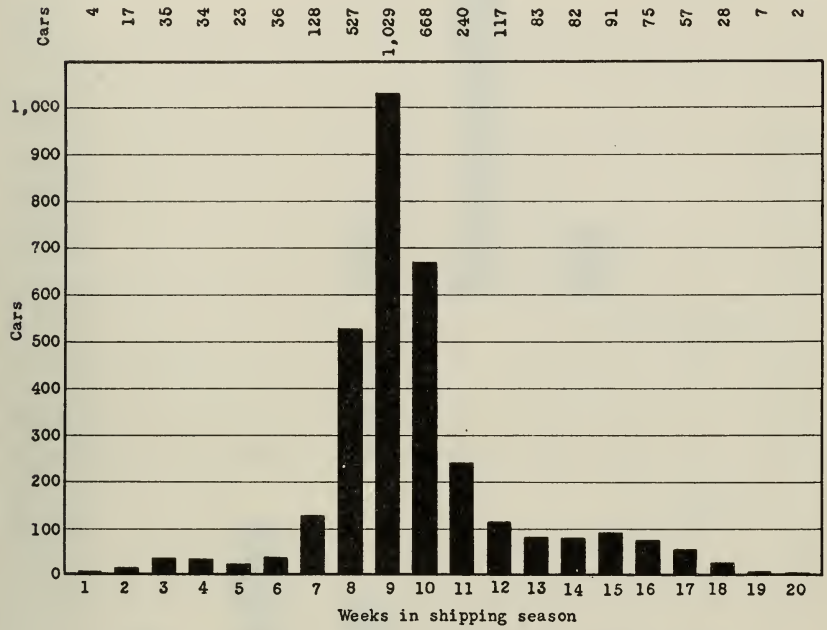


Fig. 20.—Most of California's fresh peaches are shipped between the middle of July and the middle of August.

Data from table 34.

and continue for twenty weeks. The bulk of the peaches, however, are shipped during the eighth, ninth, and tenth weeks, which are usually between the third week in July and the second week in August. There is, of course, considerable variation in the shipping season from year to year. In 1931 the season was unusually early; the peak shipments came in the week ending July 18. On the other hand, the 1927 season was unusually late; the peak shipment that year was in the week ending August 13.

Competition from Other Peach-Producing States.—There is no time during the entire shipping season when California fresh peaches are not subject to considerable competition from those grown in other states. In

MONTHLY CARLOT SHIPMENTS OF FRESH PEACHES, UNITED STATES, AVERAGE 1926–1930

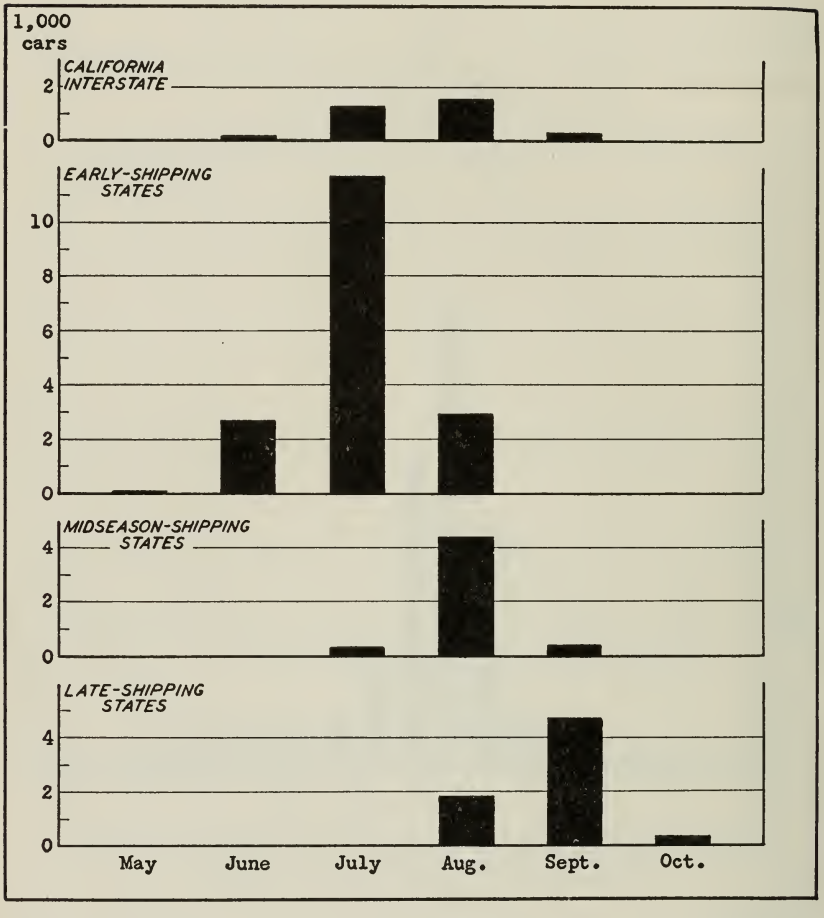


Fig. 21.—The shipping season of California fresh peaches occurs at the time when shipments from other states are also heavy.

Data from table 16.

figure 21 the 1926–1930 average monthly shipments of fresh peaches from the early, midseason, and the late-shipping groups of states are compared with the average monthly shipments from California. The states included in each group are given in table 16. Shipments from the early-shipping states begin in May and reach the peak in July, those from the midseason-shipping states begin in July and reach the peak in August, while those from the late-shipping states begin in August and reach the peak in September.

TABLE 16

Monthly Carlot Shipments of Peaches by States of Origin, Average 1926–1930

State	May	June	July	August	September	October	Total
Early-shipping states: total	84	2,766	11,741	2,963	.....	.....	17,554
Georgia	80	2,635	7,940	1,294	.....	.....	11,949
Arkansas	....	1	1,570	637	.....	.....	2,208
North Carolina	4	54	1,234	805	.....	.....	2,097
South Carolina	....	20	455	181	.....	.....	656
Texas	....	4	361	11	.....	.....	376
Alabama	....	35	113	19	.....	.....	167
Oklahoma	....	4	35	16	.....	.....	55
Mississippi	....	13	33	....	.....	.....	46
Midseason-shipping states: total	....	2	372	4,411	343	3	5,131
Illinois	....	2	29	2,132	80	.....	2,243
Tennessee	....	.....	299	858	.....	.....	1,157
Delaware	....	.....	5	316	50	.....	371
Virginia	....	.....	12	338	13	.....	363
Maryland	....	.....	11	263	101	.....	375
Indiana	....	.....	2	311	31	3	347
West Virginia	....	.....	1	134	67	.....	302
Kentucky	....	.....	7	45	.....	.....	52
Missouri	....	.....	6	14	1	.....	21
Late-shipping states: total	....	.....	17	1,854	4,668	373	6,912
New York	....	.....	.....	3	1,373	316	1,692
Colorado	....	.....	1	686	754	4	1,445
Washington	....	.....	5	468	630	10	1,113
Pennsylvania	....	.....	2	217	422	1	642
Utah	....	.....	1	200	432	.....	633
New Jersey	....	.....	8	244	314	.....	566
Michigan	....	.....	.....	5	394	17	416
Ohio	....	.....	.....	3	258	19	280
Idaho	....	.....	.....	19	56	1	76
Oregon	....	.....	.....	9	35	5	49
California interstate	2	103	1,285	1,571	306	14	3,281

Sources of data:
All states except California from U. S. Dept. Agr. Crops and Markets, monthly issues.
California interstate from U. S. Dept. Agr. Bur. Agr. Econ. Interstate movement of California deciduous fruits. San Francisco, California. (Mimeo.)

Total shipments from states other than California are the heaviest in July. During the five years, 1926–1930, an average of 12,130 cars was shipped during that month. In August shipments averaged 9,228 cars, and in September 5,011 cars. Thus shipments from all other states combined are heaviest during the same two months that shipments from Califorina are at the maximum.

The annual total production of peaches in these three groups of states from 1920 to 1931 is given in figure 22. In the early-shipping states there was a marked upward trend in production from 1920 to 1926, since 1928 the trend has been downward. In the midseason-shipping states there was a slight upward trend during the entire period, while

UNITED STATES PEACH PRODUCTION BY GROUPS OF STATES, 1920–1931

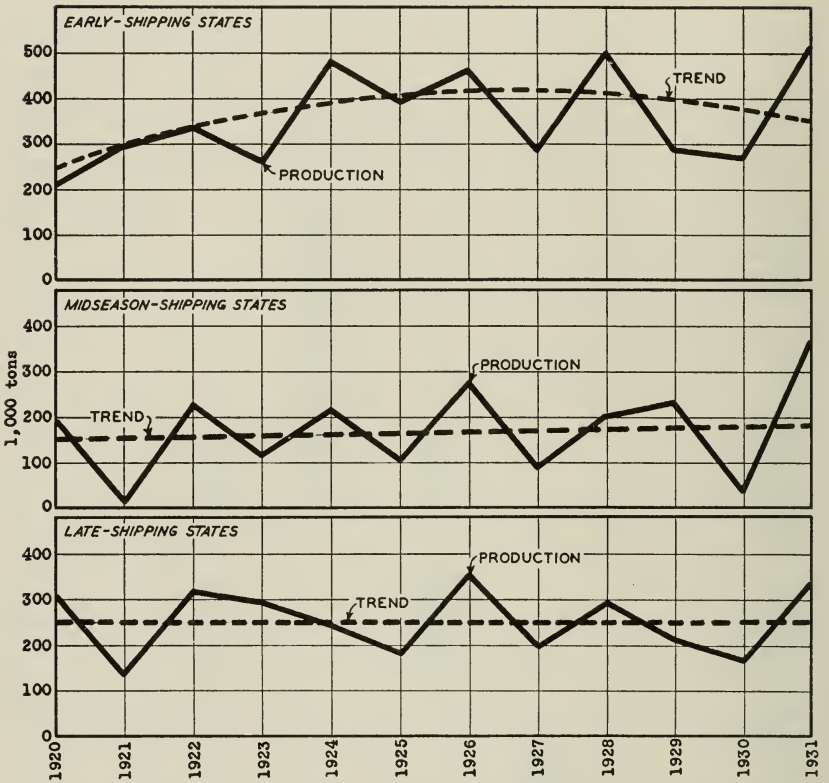


Fig. 22.—Production of peaches in the early-shipping states increased rapidly from 1921 to 1926 but has declined since 1928. In the midseason and late-shipping states the level of production has not changed materially.

Data from table 26. States included in each group are the same as in figure 21.

in the late-shipping states no definite upward or downward trend is evident.

The available data on the age distribution of peach trees in commercial orchards in Georgia, North Carolina, South Carolina, and Arkansas, the principal early-shipping states, which are given in table 17, point towards a further downward trend in production during the next few years. In 1929 about 18 per cent of the peach trees in these four states were ten years of age and over. Some of these trees have been removed or abandoned since the spring of 1929 when the survey was taken, and within the next two years virtually all of the remainder will be out of production, since the average commercial life of a peach tree in the southern states is only thirteen to fifteen years of age. The 55 per cent

of the trees which were from six to nine years of age in 1929 have now reached the age of maximum yields and will soon be declining in productivity. The decline in production from the older trees is not likely to be fully offset by the increase in bearing capacity of the young trees. Only 28 per cent of the total trees in 1929 were less than six years of age. Plantings in 1930 were relatively light.

The situation in 1929 with respect to the age distribution of the peach trees in the southern states was a decided contrast to that which pre-

TABLE 17

Age Distribution of Peach Trees in Commercial Orchards in Georgia, North Carolina, South Carolina, and Arkansas, 1925 and 1929

Age of trees	Georgia		North Carolina		South Carolina		Arkansas		Total	
	Trees	Per cent	Trees	Per cent	Trees	Per cent	Trees	Per cent	Trees	Per cent
1925 survey										
Under 6	4,720,047	59.2	1,737,187	79.3	737,643	89.4	546,663	69.1	7,741,540	65.7
6–9	2,405,086	30.1	396,309	18.1	54,916	6.7	108,214	13.7	2,964,525	25.2
10 and over	852,197	10.7	56,740	2.6	32,679	3.9	135,751	17.2	1,077,367	9.1
Total	7,977,330	100.0	2,190,236	100.0	825,238	100.0	790,628	100.0	11,783,432	100.0
1929 survey										
Under 6	2,214,668	22.8	300,992	21.5	240,063	35.0	840,792	68.7	3,596,515	27.6
6–9	5,514,500	56.8	960,110	68.5	390,615	57.0	231,342	18.9	7,096,567	54.5
10 and over	1,983,072	20.4	139,703	10.0	54,584	8.0	151,294	12.4	2,328,653	17.9
Total	9,712,240	100.0	1,400,805	100.0	685,262	100.0	1,223,428	100.0	13,021,735	100.0

Source of data:
U. S. Dept. Agr. Bur. Agr. Econ. Commercial peach orchard survey, spring of 1929. March 18, 1930. (Mimeo.)

vailed in 1925. In that year about 66 per cent of the trees were less than six years of age, 25 per cent six to nine years of age, and only 9 per cent ten years of age and older.

Competition of Other Fruits with California Fresh Peaches.—Other fresh fruits reach the consuming markets in large volume at the same time that California fresh peaches are being marketed. Table 18 shows the 1926–1930 average monthly shipments of the more important fruits which compete with fresh peaches. During the six months of May to October, strawberry and orange shipments are heaviest in May, cherry, cantaloupe, apricot, and banana shipments in June, watermelon shipments in July, pear shipments in August, plum and prune shipments in September, and table grape, grapefruit, and apple shipments in October.

Distribution of California Fresh Peaches.—Fresh peaches are distributed among a larger number of markets than are other deciduous tree fruits grown in the state. Many small markets, in which it is impossible to sell a straight carload of cherries, plums, or pears, take one or more full carloads of peaches. Reports on the destination of the interstate shipments of fresh peaches show that in 1930 one or more carloads were sent to 218 cities in the United States and 16 cities in

TABLE 18

MONTHLY CARLOT SHIPMENTS OF CERTAIN FRESH FRUITS, UNITED STATES, AVERAGE 1926–1930

Fruit	May	June	July	August	September	October
	cars	*cars*	*cars*	*cars*	*cars*	*cars*
Cherries	567	1,047	663	134	3	0
Strawberries	8,727	2,638	120	7	5	1
Cantaloupes	3,857	8,816	8,313	4,498	2,044	74
Watermelons	1,310	15,390	24,551	9,385	1,322	61
Plums and prunes	142	1,599	1,275	1,757	2,166	159
Apricots	41	359	38	0	0	0
Pears	10	218	3,276	6,922	6,901	2,908
Mixed deciduous	78	748	1,386	2,095	1,139	327
Table grapes*	0	113	1,210	3,674	5,915	7,743
Oranges	6,707	4,743	4,113	3,765	3,291	4,248
Grapefruit	1,312	293	113	55	405	1,930
Apples	2,070	1,118	2,890	3,579	15,964	39,755
Banana imports	14,427	15,278	13,504	13,285	10,055	11,224
Total	39,248	52,360	61,452	49,156	49,210	68,430

* Average 1928–1930.

Source of data:
Shipments of cherries, strawberries, cantaloupes, watermelons, plums and prunes, mixed deciduous fruit, oranges, grapefruit, apples, and pears from all states except California from: U. S. Dept. Agr. Crops and Markets, monthly issues. Apricots, table grapes, and California pears are California interstate shipments from: U. S. Dept. Agr. Bur. of Agr. Econ. Interstate movement of California deciduous fruits. San Francisco, California. (Mimeo.) Banana imports are from: U. S. Dept. Com. Monthly Summary of Foreign Commerce of the United States, monthly issues.

Canada. The wide distribution of California fresh peaches is also indicated by the fact that only one-half of the interstate shipments, on the average, are unloaded in the 64 principal markets of the United States outside of California.

Although California fresh peaches are shipped to many of the states in the Union, the bulk of the crop is marketed in the area west of Indiana and north of Arkansas. During the three years 1928–1930, approximately 75 per cent of the interstate shipments were sent to markets in this area. Markets in the eastern states are much more accessible to the other important peach-producing sections than they are to California. It is only in those years when the peach crop in these other states is small that California growers can profitably market large quantities in the eastern markets. Ordinarily Cleveland, Ohio, for example, is not an

Average Delivered Auction Prices of California Elberta Peaches at Chicago, 1921–1931

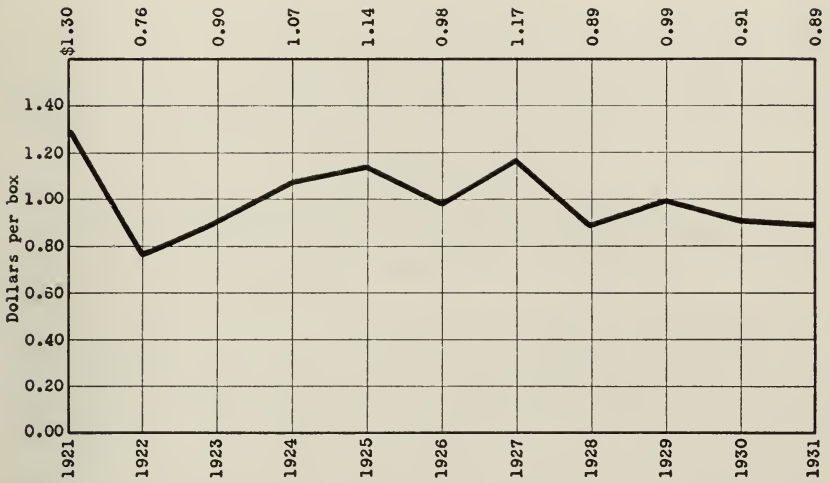


Fig. 23.—During the four years 1928–1931, the average price of California Elberta peaches at Chicago was 15 per cent below the average of the previous four years.

Data from the Chicago Daily Fruit and Vegetable Reporter.

TABLE 19

United States Production and Exports of Fresh Peaches, 1922–23 to 1930–31

Year: May–April	Production	Exports	Percentage of production exported
	1	*2*	*3*
	tons	*tons*	*per cent*
1922–23	969,000	6,484	0.67
1923–24	768,000	7,536	0.98
1924–25	1,005,000	8,022	0.80
1925–26	777,000	8,120	1.05
1926–27	1,143,000	7,240	0.63
1927–28	689,000	8,847	1.28
1928–29	1,060,000	11,109	1.05
1929–30	805,000	9,970	1.24
1930–31	605,000	6,359	1.05
1931–32	1,180,000	5,446	0.46

Sources of data:
Col. 1: from table 27, col. 4.
Col. 2: from U. S. Dept. of Com. Monthly Summary of Foreign Commerce of the United States, monthly issues.

important market for California fresh peaches; yet in 1930, when the fresh-peach crop throughout the country was short, 89 cars of California peaches were unloaded in that city. On the other hand, in 1928 when the United States fresh-peach crop was large, only 9 cars California peaches were unloaded in Cleveland.

Prices of California Elberta Peaches.—The Elberta is the most important variety of California peaches shipped fresh. Approximately 62

TABLE 20

UNITED STATES EXPORTS OF FRESH PEACHES BY COUNTRIES OF DESTINATION, AVERAGE 1925–1929, ANNUAL 1925–1930

Country of destination	Calendar year						
	Average 1925–1929	1925	1926	1927	1928	1929	1930
	tons	*tons*	*tons*	*tons*	*tons*	*tons*	*tons*
Canada	8,399	7,491	6,625	8,265	9,965	9,651	5,986
Cuba	180	227	194	262	152	63	137
United Kingdom	179	166	200	86	366	78	16
Mexico	140	145	134	152	146	121	121
Brazil	93	12	22	23	401	8	36
Panama	20	22	24	29	7	16	25
Philippine Islands	5	6	4	8	2	6	6
Newfoundland and Labrador	3	0	2	9	0	3	3
Others	36	44	22	31	51	33	37
Total	9,055	8,113	7,227	8,865	11,090	9,979	6,367

Source of data:
U. S. Dept. of Com. Foreign Commerce and Navigation of the United States, annual issues.

per cent of the total sales of California freestone peaches on the Chicago auction market during the five years 1927–1931 were Elbertas.

The average auction prices of California Elbertas at Chicago from 1921 to 1931 are shown in figure 23. During the four years 1924–1927, prices were relatively favorable, averaging $1.09 a box, which with the 1931 freight and refrigeration rates is equivalent to a farm price of about $34 a ton.[11] Since 1927 prices have been lower; the 1928–1931 average auction price was $0.92 a box, which is equivalent to a farm price of about $18 a ton. Considering the recent decline in the general price level, the depressed buying power of consumers, and the very large peach crop in other states, prices of California Elbertas held up remarkably well in 1931, the average for the season being $0.89 a box. Perhaps the chief cause of the relatively favorable showing in 1931 was the small volume of California Elbertas shipped to eastern markets.

[11] The freight and refrigeration rate to Chicago in 1931 was $0.4472 a box. The standard commission rate is 7 per cent of the delivered price. The cost of packing and loading was approximately $0.23 a box.

Shipments of all fresh peaches from California in 1931 amounted to 1,864 cars as against an average of 3,282 cars during the five years 1926–1930.

United States Exports of Fresh Peaches.—Virtually all of the United States production of fresh peaches is consumed in this country. Export markets have never afforded an outlet for as much as 2 per cent of the crop. The United States harvested production and exports of fresh peaches from 1922–23 to 1930–31 are given in table 19. Average exports during the three years 1922–23 to 1924–25 amounted to 7,347 tons, or 0.8 per cent of the average production, as against 9,068 tons, or 1.1 per cent of the average production, during the three years 1928–29 to 1930–31.

Canada has always been the principal foreign market for our fresh peaches, taking on the average about 93 per cent of the total exports. During the five years 1925–1929, Cuba ranked next in importance, followed closely by the United Kingdom (table 20).

The failure of European countries, particularly the United Kingdom, which normally imports large quantities of fresh apples and pears from this country, to take substantial quantities of fresh peaches is apparently due to the difficulty of obtaining a quality product at a reasonable price. Fresh peaches are relatively perishable as compared with fresh apples and fresh pears, and consequently cannot be shipped abroad as easily or as cheaply as these other fruits.

PEACH ACREAGE AND PRODUCTION IN FOREIGN COUNTRIES

Commercial peach production is limited to only a few of the countries in the world. The principal peach-producing countries, other than the United States, are Australia, Union of South Africa, and Chile.

Australia.—The rapid expansion of the fruit industry in Australia prior to and following the War is closely connected with the irrigation projects fostered by state and federal authorities. Unfavorable financial conditions have since checked these development projects. While considerable increase in the fruit industry is possible in the present irrigated areas, high cost of development, relatively low yield per acre, and restriction of state and federal assistance are likely to prevent any great expansion in the near future. The total acreage in peaches has been declining steadily since 1921–22. The consistent decline in nonbearing acreage shows that no change in the trend of production is to be expected from this source.

The decline in peach production which is indicated, does not necessarily imply a similar decline in the production of dried peaches, how-

TABLE 21

ACREAGE AND PRODUCTION OF PEACHES IN AUSTRALIA 1921–22 TO 1930–31

Crop year	Peach acreage			Peach production		
	Total	Bearing	Nonbearing	Total	Canned	Dried
	1	*2*	*3*	*4*	*5*	*6*
	acres	*acres*	*acres*	*tons**	*cases*	*tons*
1921–22	29,567	23,187	6,380	43,908	.....	523
1922–23	27,506	21,453	6,053	45,996	.....	825
1923–24	26,940	21,709	5,231	43,330	479,051	500
1924–25	27,140	22,338	4,802	47,870	643,900	475
1925–26	25,761	21,325	4,436	50,232	758,999	389
1926–27	25,420	20,910	4,510	40,541	621,360	289
1927–28	24,869	20,877	3,992	50,077	982,938	653
1928–29	23,722	20,301	3,421	39,731	662,927	524
1929–30	23,247	19,934	3,313	44,969	1,113,766	538
1930–31	.....	.....	.....	.....	683,796	.....

* Converted from bushels on the basis of 45 pounds per bushel.

Source of data:
Compiled by U. S. Dept. Agr. Bur. Agr. Econ., Foreign Service Division, from officia sources.

TABLE 22

EXPORTS OF DRIED PEACHES FROM AUSTRALIA BY COUNTRIES OF DESTINATION, 1921–22 TO 1930–31

Year: July–June	Total	Country of destination		
		United Kingdom	New Zealand	Others
	tons	*tons*	*tons*	*tons*
1922–23	377	354	18	5
1923–24	88	80	5	3
1924–25	5	4	1	0
1925–26	7	1	5	1
1926–27	7	4	0	3
1927–28	3*	1	1	1
1928–29	155	149	4	2
1929–30	196	156	3	37
1930–31	204	109	27	68

* Including 1.4 tons reexport.

Source of data:
Compiled by U. S. Dept. Agr. Bur. Agr. Econ., Foreign Service Division, from official sources.

ever. The dried-peach industry has been subsidiary to the fresh and canned-fruit industries, drying being resorted to as a means of salvaging such fruit that could not be handled fresh or canned.[12] From 5 to 10 per cent of the total production is utilized in this way. However, by far the greater part of the peach crop is sold fresh. Peach acreage and the utilization of peach production from 1921–22 to 1928–29 are given in table 21. Exports of dried peaches fluctuate widely but, in general, have been insignificant. Both 1927–28 and 1928–29, however, show an increase in the total tonnage dried and also a striking increase in exports of dried peaches as is shown in table 22. The relatively large quantity

TABLE 23

Exports of Canned Peaches from Australia by Countries of Destination, 1925–26 to 1930–31

Year: July–June	Total	United Kingdom	New Zealand	Canada	Others
	cases	*cases*	*cases*	*cases*	*cases*
1925–26	223,128	176,985	36,612	3,227	6,304
1926–27	155,340	88,590	55,751	5,536	5,463
1927–28	309,563	258,868	42,863	4,637	3,195
1928–29	262,390	177,895	45,857	33,646	4,992
1929–30	423,555	282,453	81,447	54,311	5,344
1930–31	484,965	335,429	61,818	81,611	6,107

Source of data:
Compiled by U. S. Dept. Agr. Bur. Agr. Econ., Foreign Service Division, from official sources.

dried in 1928–29 in particular, is not accounted for by the size of the peach crop, which was the smallest since 1921–22. With the very erratic export movement during the past decade, it is not possible to say yet whether or not this indicates a definite upturn in the dried-peach industry.

The principal market for dried peaches is the United Kingdom, which takes on an average nearly 90 per cent of Australia's exports. New Zealand, the only other country receiving an appreciable volume, takes about 4 per cent.

On the average, from 10 to 15 per cent of the Australian peach crop is canned, about 25 per cent of the canned pack being exported. Practically the entire Australian canned pack is of standard grade.[13] While the quality has been greatly improved, Australian canned goods still sell at a discount under American goods in the United Kingdom. The

[12] United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Australian canned fruit industry. Trade Inform. Bul. 703:20. 1930.

[13] United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Australian canned fruit industry. Trade Inform. Bul. 703:18. 1930.

advantage obtained by Australia through the United Kingdom's preferential duty rate on sugar is offset by this discount. Table 23 gives the exports of Australian canned peaches during 1925–26 to 1929–30 by countries of destination. The United Kingdom constitutes Australia's main market, taking on an average 70 per cent of the total exports. New Zealand, taking about 20 per cent, was until 1928–29 the only other single country taking a significant portion of Australia's canned exports. During 1928–29 and 1929–30 Australian exports to Canada

TABLE 24

EXPORTS OF FRESH PEACHES FROM THE UNION OF SOUTH AFRICA BY COUNTRIES OF DESTINATION, 1922 TO 1931

Calendar year	Total	United Kingdom	Portuguese East Africa	Belgian Congo	Others
	boxes	*boxes*	*boxes*	*boxes*	*boxes*
1922	113,000	108,000	2,000	1,000	2,000
1923	130,000	125,000	4,000	*	1,000
1924	97,000	92,000	3,000	*	2,000
1925	255,000	251,000	3,000	1,000	0
1926	120,000	114,000	3,300	1,200	1,500
1927	380,000	369,000	5,400	1,600	4,000
1928	175,000	167,000	4,700	1,200	2,100
1929	368,000	359,000	3,200	2,900	2,900
1930	441,554	424,919	8,340	2,886	5,409
1931	391,015	362,423	14,287	4,077	10,228

* Less than 500 boxes.

Source of data:
Compiled by U. S. Dept. Agr. Bur. Agr. Econ., Foreign Service Division, from official sources.

increased to 30,000 and 50,000 cases respectively, representing 13 per cent of the total Australian exports of those years.

The Australian canning industry has had to contend with several serious disadvantages, such as high prices for fresh fruit, high canning and shipping costs, and low prices for the canned product. In the past, however, these disadvantages have been offset by government subsidies in one form or another,[14] but recently such subsidies have been greatly reduced and under present financial conditions in Australia it is anticipated that little further assistance will be forthcoming in the near future. While present conditions continue, therefore, expansion of the canning industry in Australia is unlikely.

South Africa.—Peaches are grown in practically all sections of the Union of South Africa. The Cape Province, however, offers the most suitable conditions and it is here and in the Transvaal that commercial

[14] For a summary of government marketing subsidies see: United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Australian canned fruit industry. Trade Inform. Bul. 703:19. 1930.

peach production has had its greatest development.[15] The number of trees in the Union of South Africa increased from 5,446,000 in 1921–22 to 6,865,000 in 1925–26.[16] The fresh-fruit trade dominates the peach industry and exports of fresh peaches, mainly to the United Kingdom, have increased from 113,000 boxes in 1922 to 441,554 and 391,015 boxes in 1930 and 1931 respectively. These exports by countries of destination are given in table 24.

Relatively little development has taken place in the canned-peach industry in the Union of South Africa. Canning, like drying, is sub-

TABLE 25

Exports of Dried Peaches from Chile by Countries of Destination, 1921 to 1931

Calendar year	Total	Argentina	Uruguay	Peru	Others
	tons	*tons*	*tons*	*tons*	*tons*
1921	722	427	273	11	11
1922	843	655	164	16	8
1923	1,029	699	288	40	2
1924	967	747	196	23	1
1925	752	514	216	14	8
1926	787	596	186	5	0
1927	1,156	911	225	19	1
1928	1,159	822	275	58	4
1929	1,272	845	341	83	3
1930	1,031	750	230	49	2
1931	1,003	637	314	50	2

Source of data:
Compiled by U. S. Dept. Agr. Bur. Agr. Econ., Foreign Service Division, from official sources.

sidiary to the fresh-fruit trade. The quality of the canned product has shown some improvement in recent years but still compares unfavorably with California canned peaches, lacking both the size and flavor of the latter. Many of the important peach districts are in the Transvaal and the northern part of the Free State. Here the rainy weather, coinciding with the ripening season, renders drying unsatisfactory.[17] The dried peaches entering into export trade are produced mainly in the south-western and to some extent in the eastern districts of the Cape Province. In these areas there is some increase in drying. The majority of the dried peaches produced is consumed in central and eastern

[15] United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Fresh fruit industry of Union of South Africa. Trade Inform. Bul. 737:14. 1930.

[16] Union of South Africa. Office of Census and Statistics. Official Year Book 1928–29:430. 1930.

[17] United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Dried fruit industry and trade of South Africa. Trade Inform. Bul. 676:6. 1930.

Africa. Less than 40 per cent of the total production enters export trade. The dried peach is inferior to that of the United States and this, together with the greater success achieved by the apricot industry, may tend to discourage further extension of the industry.

Chile.—Data concerning acreage and production of this country are scanty, but a clue to the trend of peach production can be obtained from the exports of dried peaches (table 25). Dried-peach exports constitute about 40 per cent of the total production.[18] From 1923 to 1925 there was a decrease in exports corresponding to the decrease in peach acreage during those years of from 10,000 to 7,000 acres. Since 1925 exports have shown a fairly steady upward trend, reaching a peak of 1,272 tons in 1929. This suggests that peach production has been expanding during the past few years.

Exports of dried peaches from Chile are almost entirely absorbed by Argentina, Uruguay, and Peru. These countries together take over 99 per cent of Chile's exports.

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[18] United States Department of Commerce, Bureau of Foreign and Domestic Commerce. International trade in dried fruits. Trade Promotion Series No. 44:92. 1927.

APPENDIX

TABLE 26

UNITED STATES PRODUCTION OF PEACHES BY STATES, AVERAGES 1910–1914 TO 1926–1930, ANNUAL 1920–1931

State	Average 1910–1914	Average 1915–1919	Average 1921–1925	Average 1926–1930	1920	1921	1922	1923
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
New Hampshire	20	33	27	24	0	29	32	40
Massachusetts	70	115	169	169	4	185	200	205
Rhode Island	20	14	25	29	3	9	28	31
Connecticut	215	211	243	215	10	290	262	232
New York	1,393	2,026	2,179	1,720	2,600	1,700	3,400	1,700
New Jersey	702	1,088	1,856	2,056	2,134	347	2,000	2,642
Pennsylvania	1,164	1,356	1,226	1,513	2,000	350	1,560	1,907
Ohio	1,322	986	1,041	1,203	3,238	335	1,584	1,386
Indiana	887	427	336	548	405	26	650	445
Illinois	1,257	513	610	1,748	770	76	1,100	675
Michigan	1,385	1,129	795	1,041	1,500	358	1,440	1,125
Iowa	276	36	57	60	100	30	200	40
Missouri	2,628	1,268	1,014	721	1,427	0	2,300	1,040
Nebraska	165	30	32	43	5	0	81	45
Kansas	1,586	561	267	180	187	24	630	78
Delaware	500	375	221	286	203	7	320	225
Maryland	751	737	405	486	692	59	495	631
Virginia	735	828	636	755	1,092	52	764	504
West Virginia	526	805	478	522	922	48	715	526
North Carolina	1,389	1,311	1,183	1,848	1,539	644	1,010	260
South Carolina	888	765	700	984	832	566	845	550
Georgia	4,290	4,899	6,468	6,909	3,799	6,550	4,900	5,248
Florida	158	89	124	89	150	130	130	120
Kentucky	1,232	774	713	585	988	80	1,218	450
Tennessee	1,680	1,215	1,329	1,323	1,500	320	2,002	460
Alabama	1,806	1,711	1,072	945	974	1,230	810	779
Mississippi	1,212	543	473	531	412	322	375	260
Arkansas	3,034	2,414	1,697	1,806	117	435	2,040	1,110
Louisiana	437	285	224	172	269	264	180	175
Oklahoma	1,063	1,305	1,254	523	180	360	2,070	1,032
Texas	2,409	3,125	1,894	1,519	800	2,200	1,920	1,700
Idaho	93	149	160	195	42	150	244	282
Colorado	625	766	766	847	670	810	900	750
New Mexico	75	111	102	77	6	8	98	189
Arizona	52	51	71	74	48	54	128	70
Utah	278	719	660	539	471	763	885	802
Nevada	7	3	5	5	6	4	6	5
Washington	409	970	877	953	155	772	950	1 333
Oregon	299	316	263	273	100	105	300	500
California	10,515	13,735	15,197	23,059	15,200	12,910	17,080	15,830
United States	47,553	47,794	46,849	56,575	45,620	32,602	55,852	45,382

TABLE 26—*(Concluded)*

State	1924	1925	1926	1927	1928	1929	1930	1931*
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
New Hampshire	0	34	29	26	25	16	23	24
Massachusetts	40	218	213	140	189	124	177	153
Rhode Island	29	30	37	23	27	27	31	40
Connecticut	220	210	255	186	239	146	249	210
New York	2,178	1,920	2,300	1,140	2,400	1,045	1,717	1,860
New Jersey	2,500	1,740	3,000	2,304	1,625	1,990	1,360	2,230
Pennsylvania	1,715	600	2,498	947	1,867	1,234	1,020	2,660
Ohio	800	1,100	2,120	1,326	1,742	478	350	2,220
Indiana	240	320	900	242	605	978	14	1,480
Illinois	700	500	2,660	1,122	1,638	3,320	0	4,300
Michigan	464	592	1,564	578	1,156	998	908	1,946
Iowa	3	12	97	65	50	77	9	112
Missouri	860	870	1,722	340	655	864	24	1,500
Nebraska	2	33	50	82	6	52	25	50
Kansas	231	371	266	259	84	256	35	330
Delaware	400	155	450	287	100	401	190	500
Maryland	600	240	700	352	465	655	260	820
Virginia	1,500	362	1,176	400	880	1,058	260	1,600
West Virginia	1,000	100	1,000	202	810	489	110	1,030
North Carolina	2,500	1,500	2,250	1,300	2,590	1,400	1,700	3,128
South Carolina	800	740	1,054	615	1,363	690	1,200	1,840
Georgia	8,342	7,304	9,400	5,943	10,000	3,700	5,500	9,134
Florida	127	115	125	69	112	66	72	92
Kentucky	1,250	570	1,110	180	1,035	530	70	1,280
Tennessee	2,450	1,415	1,860	638	2,190	1,325	600	2,850
Alabama	1,230	1,312	1,159	540	1,350	505	1,170	1,530
Mississippi	700	712	551	279	635	560	630	1,060
Arkansas	2,700	2,200	2,400	1,628	3,000	1,900	100	3,000
Louisiana	230	275	228	86	211	195	142	310
Oklahoma	1,861	950	180	760	480	1,116	80	360
Texas	1,900	1,750	2,310	800	1,612	2,073	800	1,500
Idaho	102	23	297	144	335	183	15	170
Colorado	920	450	976	892	650	953	763	1,130
New Mexico	62	156	131	40	46	109	60	101
Arizona	40	65	91	55	66	68	90	85
Utah	750	100	550	561	612	604	370	550
Nevada	2	8	8	2	5	6	6	4
Washington	460	870	1,222	250	1,470	1,225	600	1,050
Oregon	189	222	384	160	292	227	300	220
California	13,751	16,418	22,542	20,500	25,752	13,334	33,169	24,127
United States	53,848	46,562	69,865†	45,463†	68,369†	44,977	54,199†	76,586†

* Preliminary—subject to revision.

† Includes fruit not harvested as follows: 1926: 1,462,000 bushels in Georgia and northern states; 1927: 2,708,000 bushels in California; 1928: 2,917,000 bushels in California and 1,000,000 bushels in Georgia; 1930: 10,638,000 bushels in California; 1931: 8,063,000 bushels in California and 6,520,000 bushels in other states.

Sources of data:

1910–1928: U. S. Dept. Agr. Yearbooks of Agriculture (formerly Agricultural Yearbooks), except for California for the years 1912–1915 which are from: Shear, S. W. Fruit production, consumption, and utilization in the United States. (In manuscript.)

1929–1931: U. S. Dept. Agr. Bur. Agr. Econ. Fruit prospects, on July 1. July, 1932. (Mimeo.)

1931: U. S. Dept. Agr. Bur. Agr. Econ. Monthly Crop Report. September 1, 1932. (Mimeo.)

Data for California 1919–1931: Compiled and published by California Cooperative Crop Reporting Service, Sacramento.

TABLE 27

UNITED STATES PRODUCTION OF PEACHES BY USES, AVERAGES 1910–1914 TO 1926–1930, ANNUAL 1920–1931

Year	Total	Unharvested	Harvested	Shipped fresh	Canned in fresh equivalent	Dried in fresh equivalent
	1	*2*	*3*	*4*	*5*	*6*
	1,000 tons	*1,000 tons*	*1,000 tons*	*1,000 tons*	*1,000 tons*	*1,000 tons*
Averages:						
1910–1914	1,141	.....	1,141	916	79	146
1915–1919	1,147	.....	1,147	850	126	171
1921–1925	1,124	.....	1,124	810	187	127
1926–1930	1,358	90	1,268	860	281	127
Annual:						
1920	1,095	.....	1,095	783	169	143
1921	782	.....	782	528	138	116
1922	1,340	.....	1,340	969	217	154
1923	1,089	.....	1,089	768	178	143
1924	1,292	.....	1,292	1,005	152	135
1925	1,117	.....	1,117	777	251	89
1926	1,677	35	1,642	1,143	344	155
1927	1,091	65	1,026	689	242	95
1928	1,641	94	1,547	1,060	332	155
1929	1,078	.....	1,078	805	188	85
1930	1,301	255	1,046	605	297	144
1931*	1,838	350	1,488	1,180	187	121

* Preliminary—subject to revision.

Sources of data:

Cols. 1, 2, and 3: From table 26. Bushels converted to tons on basis of 48 pounds to the bushel.

Col. 4: Figures in col. 5 plus figures in col. 6 subtracted from corresponding figures in col. 3.

Col. 5: Based on the quantity canned in California (table 28, col. 4) and the proportion of the total United States canned pack put up in California as reported by the U. S. Bureau of the Census. In 1909 California contributed 78 per cent of the total United States canned pack; in 1914, 86 per cent; in 1919, 89 per cent; in 1921, 98 per cent; in 1923, 97 per cent; in 1925, 97 per cent; and in 1927, 98 per cent. Percentages for other years were interpolated.

Col. 6: From table 28, col. 5. According to the U. S. Bureau of Census Reports, all of the United States dried peaches are produced in California.

TABLE 28

California Production of Peaches by Uses, Averages 1910–1914 to 1926–1930, Annual 1920–1931

Year	Total	Unharvested	Harvested	Canned in fresh equivalent	Dried in fresh equivalent	Shipped fresh
	1	*2*	*3*	*4*	*5*	*6*
	tons	*tons*	*tons*	*tons*	*tons*	*tons*
Averages:						
1910–1914	252,400	.....	252,400	66,000	146,000	40,400
1915–1919	329,600	.....	329,600	110,600	171,200	47,800
1921–1925	364,800	.....	364,800	182,200	127,400	55,200
1926–1930	553,400	78,060	475,340	274,720	126,740	73,880
Annual:						
1920	365,000	.....	365,000	157,000	143,000	65,000
1921	310,000	.....	310,000	135,000	116,000	59,000
1922	410,000	.....	410,000	213,000	154,000	43,000
1923	380,000	.....	380,000	173,000	143,000	64,000
1924	330,000	.....	330,000	147,000	135,000	48,000
1925	394,000	.....	394,000	243,000	89,000	62,000
1926	541,000	.....	541,000	337,000	155,000	49,000
1927	492,000	65,000	427,000	237,500	94,800	94,700
1928	618,000	70,000	548,000	325,800	155,000	67,200
1929	320,000	0	320,000	182,400	85,300	52,300
1930	796,000	255,300	540,700	290,900	143,600	106,200
1931*	579,000	193,500	385,500	183,200	121,400	80,900

* Preliminary—subject to revision.

Sources of data:

Cols. 1, 2, and 3: 1910–1919 from table 26. Bushels converted to tons on the basis of 48 pounds to the bushel. 1920–1931 from California Cooperative Crop Reporting Service, Sacramento.

Col. 4: from table 4, col. 4, and table 32, col. 6.

Col. 5: from table 4, col. 6, and table 32, col. 4.

Col. 6: from table 4, col. 5, and table 32, col. 5.

TABLE 29

CANNING CLINGSTONE-PEACH PRODUCTION, CALIFORNIA 1921–1931

Year	Canned pack			Canning fruit purchased, north of Tehachapi			
	Total	Southern California	North of Tehachapi	Used for canning	Unharvested	Total	Trend
	1	*2*	*3*	*4*	*5*	*6*	*7*
	*1,000 cases**	*1,000 cases**	*1,000 cases**	*tons*	*tons*	*tons*	*tons*
1921	4,046	608	3,438	82,000	.....	82,000	104,000
1922	7,523	1,180	6,343	154,000	.....	154,000	124,000
1923	6,321	314	6,007	146,000	.....	146,000	146,000
1924	5,206	155	5,051	121,000	.....	121,000	170,000
1925	8,981	900	8,081	194,000	.....	194,000	194,000
1926	13,275	937	12,338	295,000	.....	295,000	220,000
1927	10,499	955	9,544	209,000	.....	209,000	250,000
1928	14,439	756	13,683	305,000	.....	305,000	290,000
1929	7,724	966	6,758	153,600	.....	153,600	320,000
1930	13,174	528	12,646	277,100	148,300	425,400	338,000
1931	8,349	395	7,954	172,900	94,500	267,400	338,000
1932	.....	.....	.....	.....	.....	.....	307,000

* No. 2½-can basis.

Sources of data:

Col. 1: from table 30, col. 2.
Col. 2: from Southern California Canners Association.
Col. 3: from Canners League of California.
Col. 4: Cases in col. 3 converted to tons. The number of cases per ton has varied between 41 and 46.
Col. 5: Fruit purchased on the tree by the Cling Peach Control Committee.
Col. 7: 1921–1926: trend fitted to data in col. 6. 1927–1932 calculated from data on age of trees and average yields per acre.

TABLE 30

Canned Pack, Dried Output, and Interstate Shipments of California Peaches, Averages 1910–1914 to 1926–1930, Annual 1920–1931

Year	Canned pack			Dried	Interstate shipments
	Total	Clingstones	Freestones		
	1	*2*	*3*	*4*	*5*
	*1,000 cases**	*1,000 cases**	*1,000 cases**	*tons*	*tons*
Averages:					
1910–1914	2,761	1,858	903	26,500	2,141
1915–1919	4,606	3,260	1,346	31,100	2,388
1921–1925	7,572	6,416	1,156	23,140	2,858
1926–1930	12,172	11,822	350	23,026	3,282
Annual:					
1920	6,565	5,060	1,505	26,000	3,148
1921	5,633	4,046	1,587	21,000	3,453
1922	8,784	7,523	1,261	28,000	2,361
1923	7,158	6,321	837	26,000	3,702
1924	6,141	5,206	935	24,500	1,838
1925	10,143	8,981	1,162	16,200	2,937
1926	14,059	13,275	784	28,200	1,620
1927	10,813	10,499	314	17,230	4,551
1928	14,596	14,439	157	28,200	2,637
1929	8,100	7,724	376	15,500	1,861
1930	13,294	13,174	120	26,000	5,739
1931	8,421	8,349	72	20,300	1,864

* No. 2½-can basis.

Sources of data:

Cols. 1, 2, and 3: 1910-1917: from the California Fruit News, annual statistical numbers. 1918-1931: from the Canners League of California.

Col. 4: 1910-1922: from the California Fruit News, annual statistical numbers, except for 1913, which is from: Shear, S. W. Fruit production, consumption, and utilization in the United States. (In manuscript.) 1923-1931: from Dried Fruit Association of California, receipts by members.

Col. 5: 1910-1920: from the California Fruit News, annual statistical numbers. These figures include only shipments north of the Tehachapi. Shipments south of the Tehachapi during these years were of minor importance. 1921-1924: from Kaufman, E. E., California crop report, 1928. California State Dept. of Agr. Special Pub. No. **96**: 39. 1929. 1925-1931: from U. S. Dept. Agr. Bur. of Agr. Econ. Interstate movement of California deciduous fruits. San Francisco, California. (Mimeo.)

TABLE 31

PRICES OF CALIFORNIA PEACHES—CANNING, CANNED, AND DRIED—ALL-COMMODITY INDEX OF WHOLESALE PRICES AND INDEX OF PRICES OF COMMODITIES PURCHASED BY FARMERS, 1910–1931

Year beginning June 1	Prices paid growers for No. 1 canning clingstone peaches		Prices of canned clingstone peaches f.o.b. cannery		Prices of dried peaches f.o.b. packing house		All-commodity index of wholesale prices, av. 1910–1914=100	Index of prices paid by farmers for commodities bought, av. 1910–1914=100
	Dollars per ton	Av. 1910–1914=100	Dollars per case	Av. 1910–1914=100	Cents per pound	Av. 1910–1914=100		
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1910	22.00	76	2.65	94	5.6	97	96	98
1911	44.00	152	3.15	111	9.7	167	95	101
1912	24.00	83	2.80	99	4.9	84	100	100
1913	30.00	103	2.90	103	5.1	88	101	100
1914	25.00	86	2.65	94	3.6	62	100	101
1915	12.00	41	2.45	87	3.3	57	108	106
1916	29.00	100	2.80	99	6.1	105	143	123
1917	35.00	121	3.60	127	9.4	162	181	150
1918	50.00	172	4.65	164	11.8	203	195	178
1919	88.00	303	6.40	226	20.4	352	220	205
1920	100.00	345	6.25	221	15.9	274	190	206
1921	35.00	121	4.13	146	11.4	197	136	156
1922	60.00	207	4.26	151	11.8	203	147	152
1923	30.00	103	3.68	130	7.5	129	144	153
1924	45.00	155	4.24	150	10.0	172	146	154
1925	35.00	121	3.79	134	13.8	238	150	159
1926	40.00	138	3.65	129	12.5	216	142	156
1927	22.50	78	3.16	112	9.4	162	141	154
1928	20.00	69	3.21	113	8.4	145	142	156
1929	80.00	276	4.08	144	14.5	250	138	155
1930	20.00	69	2.86	101	6.7	117	116	146
1931	14.50	50	2.59	92	6.8	119	100	126

Sources of data:

Col. 1: from California Canning Peach Growers.

Col. 3: 1910–1920 based on canners' quotations as reported in the California Fruit News, weekly issues. 1921–1931 compiled from records of canners.

Col. 5: California Fruit News, weekly issues. Average of weekly quotations on Choice Muirs, September through December.

Col. 7: U. S. Dept. Labor Bur. of Labor Statistics all-commodity index of wholesale prices in the United States converted to 1910–1914 base by dividing the new series 1926=100 by its 1910–1914 average of 68.5.

Col. 8: U. S. Dept. Agr. Bur. of Agr. Econ. The agricultural situation, monthly issues. Calendar years.

TABLE 32

CALIFORNIA PRODUCTION OF FREESTONE PEACHES BY USES, AVERAGES 1910–1914 TO 1926–1930, ANNUAL 1920–1931

Year	Total	Unharvested	Harvested	Dried in fresh equivalent	Shipped fresh	Canned in fresh equivalent
	1	*2*	*3*	*4*	*5*	*6*
	tons	*tons*	*tons*	*tons*	*tons*	*tons*
Averages:						
1910–1914	208,000	.....	208,000	146,000	40,400	21,600
1915–1919	251,200	.....	251,200	171,200	47,800	32,200
1921–1925	210,400	.....	210,400	127,400	55,200	27,800
1926–1930	196,600	2,400	194,200	126,740	59,020	8,440
Annual:						
1920	244,000	.....	244,000	143,000	65,000	36,000
1921	213,000	.....	213,000	116,000	59,000	38,000
1922	228,000	.....	228,000	154,000	43,000	31,000
1923	227,000	.....	227,000	143,000	64,000	20,000
1924	205,000	.....	205,000	135,000	48,000	22,000
1925	179,000	.....	179,000	89,000	62,000	28,000
1926	214,000	.....	214,000	155,000	40,000	19,000
1927	170,000	.....	170,000	94,800	67,700	7,500
1928	204,000	.....	204,000	155,000	45,200	3,800
1929	141,000	.....	141,000	85,300	46,600	9,100
1930	254,000	12,000	242,000	143,600	95,600	2,800
1931	182,000	.....	182,000	113,300	67,000	1,700

Sources of data:

Cols. 1, 2, and 3: 1910–1925: represents total peach production as given in table 28, minus clingstone-peach production as given in table 4. 1926–1931: from California Cooperative Crop Reporting Service, Sacramento.

Col. 4: 1910–1927: from table 30, col. 4. Dried tons were converted to equivalent fresh tons on the basis of 1 to 5.5. 1928–1931: from the California Cooperative Crop Reporting Service, Sacramento.

Col. 5: Figures in col. 4 plus figures in col. 6 subtracted from corresponding figures in col. 3.

Col. 6: From table 30, col. 3. The number of cases per ton has varied between 41 and 43.

TABLE 33

CARLOT SHIPMENTS OF PEACHES BY STATES OF ORIGIN, 1921–1931

State	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
	cars	*cars*	*cars*	*cars*	*cars*	*cars*	*cars*	*cars*	*cars*	*cars*	*cars*
Georgia	10,330	7,370	8,701	13,504	13,513	17,963	11,882	15,926	5,298	8,623	13,591
Illinois	35	1,683	390	860	579	3,010	1,975	4,637	4,637	0	5,306
Arkansas	607	1,563	724	2,785	2,300	2,529	1,780	4,010	2,679	41	4,202
North Carolina	594	1,452	215	1,657	2,024	2,155	1,702	3,242	1,250	2,172	2,564
New York	2,967	6,862	2,777	3,436	3,055	2,367	1,159	1,744	865	2,310	958
Colorado	1,223	1,428	1,254	1,772	834	1,271	1,709	1,117	1,765	1,369	1,507
Tennessee	217	248	53	752	605	1,806	503	2,077	1,144	256	1,364
Washington	1,117	990	1,645	412	991	1,419	248	1,741	1,554	609	912
South Carolina	31	73	16	91	239	448	644	842	598	747	862
Pennsylvania	45	268	615	448	204	828	514	807	732	330	658
Utah	805	1,261	1,203	1,109	94	774	798	694	550	341	213
Others	1,687	6,068	5,720	5,407	3,635	6,479	4,039	3,208	4,599	620	3,080
Total, all states except California	19,658	29,266	23,313	32,233	28,073	41,049	26,569	37,383	25,671	17,418	35,217
California interstate	3,453	2,361	3,702	1,838	2,937	1,620	4,551	2,637	1,861	5,739	1,864
Total	23,111	31,627	27,015	34,071	31,010	42,669	31,120	40,020	27,532	23,157	37,081

Sources of data: All states except California from U. S. Dept. Agr. Crops and Markets, monthly issues. California interstate from table 30, col. 5.

TABLE 34

WEEKLY INTERSTATE SHIPMENTS OF CALIFORNIA FRESH PEACHES, 1926–1931
(Week ending Saturday)

	1926		1927		1928		1929		1930		1931	
	Week ending	Cars	Week ending	Cars	Week ending	Cars	Week ending	Cars	Week ending	Cars	Week ending	Cars
May	22	2	21	0	19	0	18	0	24	0	16	1
	29	5	28	0	26	5	25	0	31	0	23	1
June	5	14	4	0	2	1	1	0	7	1	6	20
	12	50	11	0	9	8	8	1	14	10	13	37
	19	13	18	6	16	38	15	13	21	45	20	9
	26	19	25	45	23	27	22	49	28	29	27	33
July	3	25	2	23	7	50	6	27	5	23	4	71
	10	48	9	7	14	298	13	22	12	63	11	199
	17	213	16	20	21	795	20	37	19	149	18	531
	24	628	23	54	28	631	27	114	26	919	25	388
August	7	65	6	1,091	4	139	3	582	2	1,911	1	98
	14	34	13	1,228	11	85	10	538	9	1,006	8	38
	21	41	20	898	18	71	17	135	16	525	15	40
	28	42	27	336	25	70	24	27	23	296	22	40
							31	21	30	196	29	47
September	4	63	3	144	1	69	7	7	6	172	5	124
	11	53	10	85	8	115	14	8	13	222	12	111
	18	24	17	120	15	135	21	51	20	114	19	47
	25	13	24	91	22	67	28	80	27	41	26	19
					29	15						
October	2	1	1	44	6	2	5	48	4	14	3	7
	9	1	8	15	13	1	12	16	11	2	10	2
	16	0	15	0	20	0	19	4	18	1	17	0
Total		1,620		4,551		2,637		1,861		5,739		1,864

Source of data:
U. S. Dept. Agr. Bur. of Agr. Econ. Interstate movement of California deciduous fruits. San Francisco, California. (Mimeo.)

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